Tanzania

Reproductive and Child Health Survey

1999

National Bureau of Statistics

MEASURE *DHS+*
Macro International Inc.

Tanzania Reproductive and Child Health Survey 1999

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Dar es Salaam, Tanzania

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MEASURE DHS+

This report presents results from the 1999 Tanzania Reproductive and Child Health Survey (TRCHS) which was undertaken by the National Bureau of Statistics in collaboration with the Reproductive and Child Health Section of the Ministry of Health. Financial assistance for the survey was provided by the U.S. Agency for International Development (USAID/Tanzania), UNICEF/Tanzania, and the United Nations Population Fund (UNFPA/Tanzania). The TRCHS is part of the worldwide MEASURE Demographic and Health Surveys (*DHS+*) project which is designed to collect, analyse and disseminate data on fertility, family planning, maternal and child health, and HIV/AIDS.

Additional information about the TRCHS may be obtained free of charge from the National Bureau of Statistics, P.O. Box 796, Dar es Salaam (telephone: 135-602; fax: 135-601). Information about the MEASURE *DHS+* project may be obtained from Macro International Inc., 11785 Beltsville Drive, Suite 300, Calverton, MD 20705 (telephone: 301-572-0200; fax: 301-572-0999).

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FOREWORD

The National Bureau of Statistics takes pleasure in presenting this report on the 1999 Reproductive and Child Health Survey (TRCHS). The 1999 TRCHS is the latest in a series of periodic surveys to measure levels, patterns, and trends in demographic and health indicators, the first having been the 1991-92 Tanzania Demographic and Health Survey (TDHS).

This report contains findings from the 1999 TRCHS regarding data from the households visited. The tables and text cover the most important indicators and should be of use to policy makers and program administrators who need up-to-date data for evaluating their activities and planning future directions. Findings from the survey covering health facilities will be produced in a separate report.

The successful completion of the 1999 TRCHS was made possible by the joint effort of a number of organisations and individuals, whose participation we would like to acknowledge with gratitude. First, is the U.S. Agency for International Development (USAID)/Tanzania which has long supported the collection and utilisation of data to evaluate the family planning and health programmes in Tanzania and which initiated planning for this survey and provided the bulk of the funding to implement it. UNICEF/Tanzania and UNFPA/Tanzania also contributed substantially to both the survey design and the funding for the survey. Many other organisations contributed to the questionnaire content and/or the field staff training, including the Reproductive and Child Health Unit at the Ministry of Health, the Tanzania Food and Nutrition Centre, and the National AIDS Control Programme and Mount Meru Hospital. We would also like to thank the Demographic and Health Surveys program of Macro International Inc. in Calverton, Maryland, U.S.A. for providing technical assistance in all phases of the project. The survey would not have gotten off the ground without the exemplary and tireless efforts of the staff at the National Bureau of Statistics. Their many long days of overtime work have served to make this survey effort a success. Similarly, the nurses who acted as interviewers for the survey deserve our heartfelt thanks. Finally, we are ever more grateful to the survey respondents who contributed generously part of their time to enable us to gather crucial data for our country's future planning.

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SUMMARY OF FINDINGS

The 1999 Tanzania Reproductive and Child Health Survey (TRCHS) is a nationally-representative sample survey covering 4,029 women age 15-49 and 3,542 men age 15-59. The TRCHS was designed to provide information on levels and trends of fertility, family planning knowledge and use, infant and child mortality, and indicators of maternal and child health and nutrition. Fieldwork for the TRCHS took place from early September to late-November 1999.

Survey data generally confirm patterns observed in the 1996 Tanzania Demographic and Health Survey (TDHS), showing increasing contraceptive use and more widespread knowledge about HIV/AIDS; however, results show that many challenges still exist.

FERTILITY

Fertility Decline. The TRCHS data indicate that there has been a small decline in fertility since the 1996 survey. The total fertility rate has dropped from 5.8 births per woman in the period 1994-96 to 5.6 births for the period 1997-99. The rate of decline may be slowing somewhat, however, and the level of fertility is still high.

Large Fertility Differentials. Significant differences in fertility levels are evident from survey data. For example, the total fertility rate among rural women is twice that of urban women (6.5 versus 3.2). Fertility levels are closely related to women's education. Women with no formal education give birth to an average of 6.5 children in their lifetime, compared with 4.9 for women who have completed primary school.

Unplanned Fertility. One reason for the relatively high fertility levels is that unplanned pregnancies are still common. Overall, more than one in five births in the three years prior to the survey were reported to be unplanned; 11 percent were mistimed (wanted later) and 11 percent were unwanted. Unwanted births are disproportionately high among older women who already have several children, the very women who are at higher risk of fertility-related illness and higher child mortality. If unwanted births could be eliminated altogether, the total fertility rate in Tanzania would be 4.8 births per woman instead of the actual level of 5.6.

Ideal Family Size. Although a reduction in the number of unplanned births would reduce fertility substantially, Tanzanian women and men still want to have large families. Even those who have two children or fewer say they would ideally like to have almost five children on average.

FAMILY PLANNING

Increasing Use of Contraception. A major cause of the declining fertility in Tanzania has been the slow but steady increase in contraceptive use over the last decade. The contraceptive prevalence rate has doubled since 1991-92, from 10 to 22 percent of all women. Use of modern methods has grown from 6 to 16 percent of all women. Overall, there has been a steady growth in the contraceptive prevalence rate with an average increase of one and a half percentage points a year.

Method Mix. In terms of "method mix," the dominant change over the last 8 years has been the large increase in the number of women using injectable contraception. The proportion of women relying on injectables increased from less than half a percent in 1991-92 to over 5 percent in 1999 and the injectable now accounts for one-quarter of all contraceptive use.

Use of condoms, periodic abstinence and withdrawal have also increased somewhat over the past few years. A levelling off in pill use may indicate that some women are switch-

ing from the pill to injectables. The low level of use of permanent methods such as sterilisation and implants is of concern, given the high level of unplanned births among high-parity, older women.

Differentials in Family Planning Use. Differentials in current use of family planning are large. Urban women are almost twice as likely as rural women to be using a contraceptive method (33 versus 18 percent). Women in the Mainland are more likely to use than those on Zanzibar. However, the largest differences are found by education—contraceptive use among women with some secondary education is three times higher than among those with no education.

Knowledge of Contraception. The proportion of women and men who know of at least one contraceptive method has been over 75 percent for some time and the TRCHS results indicate that the proportion has increased to over 90 percent. Moreover, the mean number of methods that women and men say they have heard of has grown from 4 in 1996 to 6 in 1999. Knowing about more methods provides a basis for wider choice.

Unmet Need for Family Planning. Unmet need for family planning has declined slightly since 1996. Data from the 1996 TDHS show that 19 percent of all women were in need of services, compared with 17 percent in the 1999 TRCHS. Two-thirds of the unmet need is comprised of women who want to space their next birth, while just one third is for women who do not want any more children (limiters). If all women who say they want to space or limit their children were to use methods, the contraceptive prevalence rate could be increased from 22 percent to 40 percent of all women. Currently, 56 percent of this "total demand" for family planning is being met.

Family Planning Messages. Survey data show that family planning messages are continuing to get through to couples. As in 1996, just over 40 percent of women have heard a family planning message on the radio in the six months prior to the survey, while 5 percent have seen a message on the television and one-fifth have seen a poster. Taking all sources into account, two-thirds of women and 70 percent of men say they have seen or heard a family planning message in the last six months. The proportion of women and men who say they have seen or heard specific programs such as *Zinduka!* and *Twende na Wakati* has also increased since 1996.

MATERNAL AND CHILD HEALTH

Maternal Health Care. TRCHS data point to several areas regarding maternal health care in which improvements could be made. Although the proportion of Tanzanian mothers who receive antenatal care from a doctor, nurse, midwife or medical aide has remained steady at just over 90 percent since 1991-92, there has been a shift in providers from nurses and midwives to the less well-trained health aides. The proportion of pregnant women receiving at least one tetanus toxoid injection has declined from 92 percent in 1996 to 83 in 1999. The data also show a disturbingly steady decline in the proportion of births that occur in a health facility—from 53 percent in 1991-92 to 47 percent in 1996 to 44 percent in 1999. Because of this decline, the proportion of births assisted by trained medical personnel (doctors, nurses, midwives) has declined from 44 percent in 1991-92 to 36 percent in 1999. Less than one in five of those who deliver at home go to a health facility for a postnatal check-up within a month after delivery.

Possible Leveling Off of Childhood Mortality Decline. Survey results imply that the decline in childhood mortality documented in the 1996 TDHS may be stagnating or even increasing slightly. The TRCHS rates show that almost 1 in 7 children born in Tanzania dies before reaching the fifth birthday, an indication that there is still much improvement to be made. The under-five mortality rate measured in the survey is 147 deaths per 1,000 births; the infant mortality rate is 99 per 1,000.

Childhood Vaccination Coverage. The 1999 TRCHS results show that 68 percent of children age 12-23 months are fully vaccinated, close to the 71 percent in 1996.

Childhood Health. The TRCHS provides data on some of the more common childhood illness and their treatment. Just over 1 in 3 children under age five had a fever and 14 percent had respiratory illness in the two weeks before the survey. Of these, two-thirds were taken to a health facility for treatment. Twelve percent of children under five were reported to have had diarrhoea in the two weeks preceeding the survey. The fact that two-thirds of children with diarrhoea received some type of oral rehydration therapy (fluid made from an ORS packet or increased fluids) is encouraging.

Breastfeeding Practices. The TRCHS results document a relatively long duration of breastfeeding, with a median duration of 21 months. Although breastfeeding has beneficial effects on both the child and the mother, TRCHS data indicate that supplementation of breastfeeding with other liquids and foods occurs too early in Tanzania. For example, among newborns less than four months of age, 60 percent are already receiving complementary foods or liquids.

Nutritional Status of Children. Results show no appreciable change in the nutritional status of children in Tanzania. Over 40 percent of children under five show evidence of chronic malnutrition or stunting, while 5 percent are acutely malnourished (wasted).

Vitamin A Supplementation. Over the past decade, several studies have proved the importance of adequate vitamin A in mitigating the severity of maternal and childhood illnesses and thereby reducing mortality. Supplementing young children and postpartum women with a capsule containing a high dose of vitamin A is an easy way to ensure adequate intake. However, survey data show that only 14 percent of children aged 6-59 months received a high-dose vitamin A supplement in the six months prior to the survey. Vitamin A supplementation for postpartum women has about the same coverage; 12 percent of women received a supplement within 2 months after delivering.

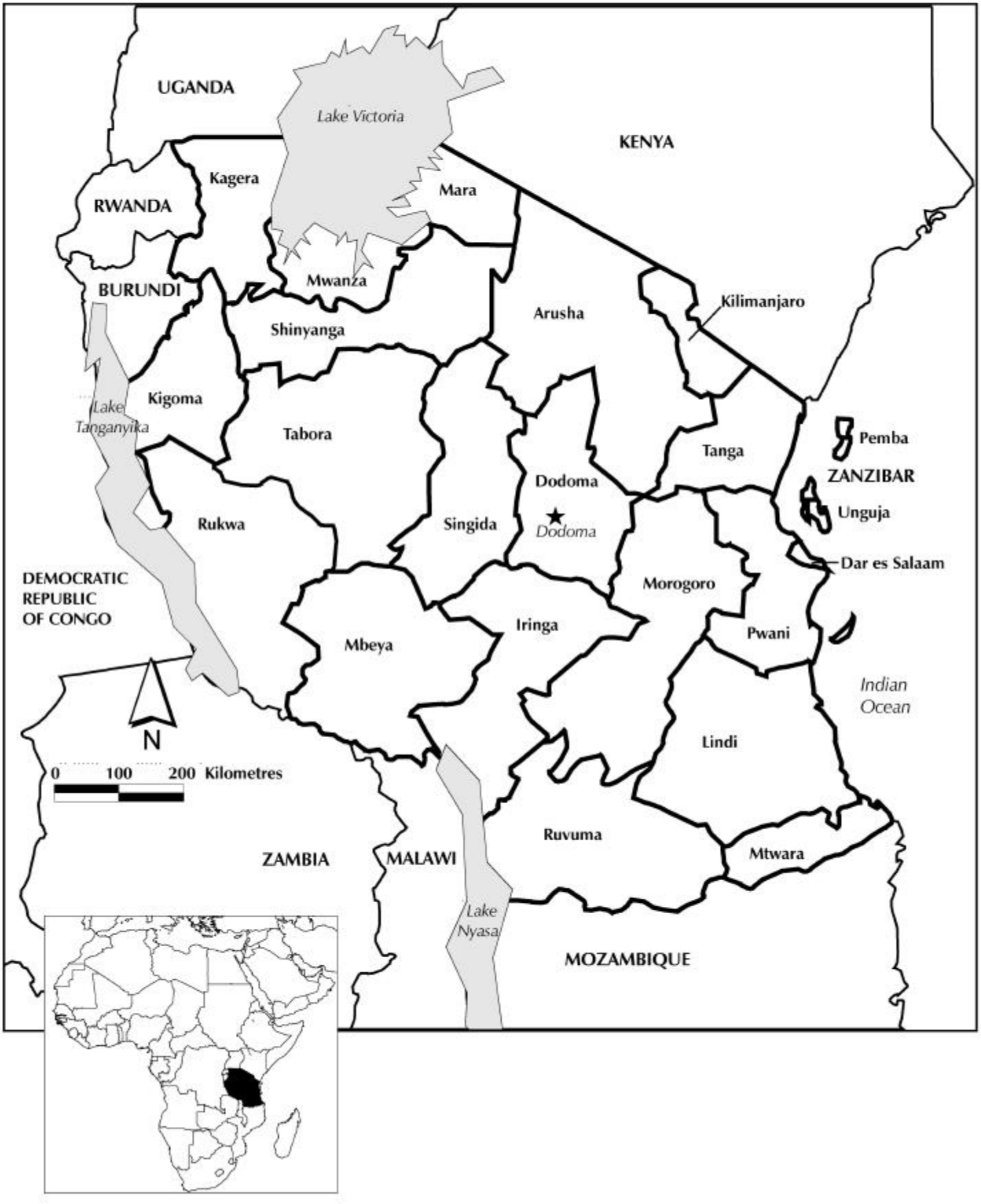
HIV/AIDS-Related Indicators

Awareness of AIDS. The TRCHS results confirm the fact that 97 percent of women and 99 percent of men have heard of HIV/AIDS. They also indicate an improvement in knowledge about how the disease is spread, which is reflected in an increase in the proportion of women and men who can list most of the major ways to avoid getting the illness. Around three-quarters or more of respondents know that HIV can be passed from a mother to her child and that a healthy-looking person can be infected.

Condom Use. One of the main objectives of the Tanzanian AIDS control programme is to encourage consistent use of condoms, especially with partners who may be exposed to HIV with other partners or through other risky behaviour. TRCHS data show that condom use with extramarital partners has increased since 1996 for women but not for men. Almost one in four women and 34 percent of men who had sex with someone other than a husband or wife in the previous 12 months said they used a condom the last time. Half of the respondents feel it is acceptable for a woman to ask a man to use a condom, while almost 60 percent say that if a man has a sexually transmitted disease, it is acceptable for his wife to ask him to use condoms or to refuse to have sex with him.

HIV Testing. TRCHS data show that 7 percent of women and 12 percent of men have been tested for HIV, which represents a slight increase from 1996 (4 and 11 percent, respectively). As before, about two-thirds of those not tested say they would like to be. Major reasons for not getting tested are not knowing where to go and not having the time to go.

TANZANIA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INTRODUCTION 1

1.1 GEOGRAPHY, HISTORY, AND THE ECONOMY

GEOGRAPHY

The United Republic of Tanzania is the largest country in East Africa, covering 940,000 square kilometres, 60,000 of which are inland water. Tanzania lies south of the equator and shares borders with eight countries: Kenya and Uganda to the north; Rwanda, Burundi, Democratic Republic of Congo, and Zambia to the west; and Malawi and Mozambique to the south.

Tanzania has an abundance of inland water, with several lakes and rivers. Lake Tanganyika runs along the western border and is Africa's deepest and longest freshwater lake and the world's second deepest lake. Lake Victoria is the world's second largest lake and drains into the Nile River and then to the Mediterranean Sea. The Rufiji River is Tanzania's largest river and drains into the Indian Ocean south of Dar es Salaam. Although there are many rivers, only the Rufiji and Kagera are navigable by anything larger than a canoe.

One of Tanzania's most distinctive geological features is the Great Rift Valley, which was caused by geologic faulting throughout eastern Africa and is associated with volcanic activity in the northeastern regions of the country. Two branches of the Great Rift Valley run through Tanzania. The western branch holds Lakes Tanganyika, Rukwa, and Nyasa, while the eastern branch ends in northern Tanzania and includes Lakes Natron, Manyara, and Eyasi.

Except for a narrow belt of 900 square kilometres along the coast, most of Tanzania lies 200 metres or more above sea level and much of the country is higher than 1,000 metres. In the north, Mount Kilimanjaro rises to 5,895 metres—the highest point in Africa.

The main climatic feature for most of the country is the long dry spell from May to October, followed by a period of rainfall between November and April. The main rainy season along the coast and the areas around Mount Kilimanjaro is from March to May, with short rains between October and December. In the western part of the country, around Lake Victoria, rainfall is well distributed throughout the year, with the peak period between March and May.

HISTORY

Tanzania (then Tanganyika) became independent of British colonial rule in December 1961. One year later, on December 9, 1962, it became a republic, severing all links with the British crown except for its membership in the Commonwealth. The off-shore island of Zanzibar became independent on January 12, 1964, after the overthrow of the rule of the Sultanate. On April 26, 1964, Tanganyika and Zanzibar united to form the United Republic of Tanzania. Administratively, the Mainland of Tanzania is divided into 20 regions and Zanzibar is divided into five regions. Each region is subdivided into districts.

ECONOMY

Tanzania has a mixed economy in which agriculture plays a key role. Agriculture—which comprises crop, animal husbandry, forestry, fishery, and hunting subsectors—contributes the largest share of any sector to the gross domestic product (GDP).

The GDP increased by 4.8 percent in 1999 according to the constant 1992 prices, compared with 4.0 percent recorded in 1998. However, this growth did not reach the target of 5.8 percent, which was predicted in the 1995-96 to 1997-98 Economic Recovery Programmes. The economic growth rate attained in 1999 is higher than the predicted population growth rate of 2.8 percent.

1.2 DEMOGRAPHIC STATISTICS

Table 1.1 gives the demographic indices as compiled from the censuses since 1967. The 1967 population census of Tanzania reported a total population of 12.3 million. According to the 1988 census, the population had increased to 23.1 million. Tanzania is still sparsely populated, although the population density is high in some parts of the country and has been increasing over time. In 1967, the average population density was 14 persons per square kilometre; by 1988, it had increased to 26 persons per square kilometre. Although the population is still predominantly rural, the proportion of urban residents has been increasing steadily, from 6 percent in 1967 to 18 percent in 1988. While the crude death rate in Tanzania has been decreasing for some time, the total fertility rate—among the highest in Africa—is only now beginning to decline.

Table 1.1 Demographic characteristics

Selected demographic indicators, Tanzania: 1967-1996

	Year			
Index	1967	1978	1988	1996
Population (millions)	12.3	17.5	23.1	U
Intercensal growth rate	2.6	3.2	2.8	U
Sex ratio	95.2	96.2	94.2	93.2
Crude birth rate	47	49	46	41
Total fertility rate	6.6	6.9	6.5	5.8
Crude death rate	24	19	15	U
Infant mortality rate	155	137	115	88
Percent urban	6.4	13.8	18.3	19.8
Density (pop/km^2)	14	20	26	U

U = Unknown (not available)
Source: Bureau of Statistics, 1967; 1978; 1988; Bureau of Statistics and Macro International, 1997

Although many small-scale surveys have been conducted in the country, censuses and the 1991-92 and 1996 Tanzania Demographic and Health Surveys have been the only sources of demographic statistics in Tanzania. Civil registration has never been used as a source of demographic statistics because its coverage is incomplete.

1.3 POPULATION AND FAMILY PLANNING POLICIES AND PROGRAMMES

The population size of Tanzania has trebled from 7.7 million in 1948 to 23.1 million in 1988. It is estimated that the annual population increase is now more than 600,000 persons per year. It is projected that the population is now about 33 million. However, the national economy did not grow significantly in the past decade, owing to various constraints; therefore, the resources available per head increased by about 1 percent per annum between 1992 and 1999. During that period the economy grew at an average of 3.8 percent, while the per capita income increased by 0.38 percent. However, the population continued to grow at a high rate, the consequences of which are felt acutely and visibly in the public budgets for health, education, and related fields of human resource

development. It is evident, therefore, that improvement in the quality and expansion of these services is unlikely to happen without controlling rapid population growth and strengthening the national economy.

It is against this background that Tanzania adopted the 1992 National Population Policy. The principal objective of the policy is to reinforce national development through developing available resources to improve the quality of life of the people. Special emphasis is put on regulating the population growth rate, enhancing population quality, and improving the health and welfare of women and children. The primary concerns of the Population Policy are to safeguard, as much as possible, the satisfaction of the basic needs of the vulnerable groups in the population, and to develop human resources for current and future national socioeconomic progress. Since Tanzania was concerned with population and development issues before the adoption of an explicit population policy, the country has a tradition of taking into account population issues in its development plans.

With specific reference to family planning, the goals of the policy are to strengthen family planning services to promote the health and welfare of the family, the community, and the nation and eventually to reduce the rate of population growth. Other specific objectives related to population regulation include making family planning services available to all who want them, encouraging every family to space births at least two years apart, and supporting family life education programmes for youth and family planning for men and women.

The Family Planning Association of Tanzania (UMATI) introduced family planning services to Tanzania in 1959. During the early years the services were mostly provided in a few urban areas with little support from the government. With the expansion of UMATI in the early 70s, services were extended to cover more areas in the country. The government became actively involved in providing family planning services following the launch of the integrated Maternal and Child Health programme in 1974. At the 1994 International Conference for Population and Development in Cairo, Tanzania endorsed the comprehensive approach toward reproductive health. The government now aims at providing universal access to high-quality, affordable reproductive health services, including family planning. Currently, reproductive health services are provided by both governmental and nongovernmental organisations under the coordination of the Reproductive and Child Health Section of the Ministry of Health. Clinical services are complemented by community-based services.

There have been various national efforts to control the spread of HIV/AIDS since 1985. Initial efforts were mainly implemented by the Ministry of Health through the National AIDS Control Programme. Over time, involvement of other public sector, nongovernmental, and community-based organisations has occurred.

Population Services International operates a social marketing programme in Tanzania. Its purpose is to provide low-cost reproductive health, family planning, and child health products and services to low income people. The objective of the program, which has been in place since 1994, is to reduce disease and deaths by making health products accessible and affordable to low income Tanzanians, providing information, creating awareness, and promoting behaviour change through social marketing techniques. Social marketing of Salama condoms started in 1993 as part of the larger nationwide AIDS/STD control programme; social marketing of Care female condoms started in 1998. Social marketing of mosquito bednets and insecticide started in 1998.

1.4 HEALTH PRIORITIES AND PROGRAMMES

The Tanzanian government emphasises equity in the distribution of health services and views access to services as a basic human right. To respond to the worldwide efforts to attain the social goal of "Health to All" by the year 2000, Tanzania's health strategy focuses on the delivery of primary health care services. In 1991, a new Primary Health Care (PHC) strategy was developed by the Ministry of Health. The main objective of the PHC programme is to strengthen district management capacity, multisectoral collaboration and community involvement.

More than 60 percent of health services are provided by the government and the remainder are provided by nongovernmental organisations. With an extensive network of health facilities in the country, at the national level there are four consultant hospitals and two special hospitals, one of which is the university teaching hospital. Most regions have a regional hospital and there are a total of 195 hospitals in the country. There are 302 health centres and about 3,500 dispensaries. At the village level, village health posts have been established staffed with at least two village health workers. There are more than 5,550 village health workers in the country. Private institutions are increasingly playing an important role in the provision of health care, especially in urban areas. Recently, the government has undertaken a health sector reform programme, which emphasises decentralisation from the national to the regional and district levels.

1.5 OBJECTIVES AND ORGANISATION OF THE SURVEY

The 1999 Tanzania Reproductive and Child Health Survey (TRCHS) is the fourth in a series of national sample surveys. The first was the 1991-92 Tanzania Demographic and Health Survey (TDHS), which was followed by the Tanzania Knowledge, Attitudes and Practices Survey (TKAP) in 1994 and then by the 1996 Tanzania Demographic and Health Survey (TDHS).

The primary objective of the 1999 TRCHS was to collect data at the national level (with breakdowns by urban-rural and Mainland-Zanzibar residence wherever warranted) on fertility levels and preferences, family planning use, maternal and child health, breastfeeding practices, nutritional status of young children, childhood mortality levels, knowledge and behaviour regarding HIV/AIDS, and the availability of specific health services within the community.[1] Related objectives were to produce these results in a timely manner and to ensure that the data were disseminated to a wide audience of potential users in governmental and nongovernmental organisations within and outside Tanzania. The ultimate intent is to use the information to evaluate current programmes and to design new strategies for improving health and family planning services for the people of Tanzania.

The survey was undertaken by the National Bureau of Statistics in collaboration with the Reproductive and Child Health Section of the Ministry of Health. The survey was initiated and jointly funded by the U.S. Agency for International Development (USAID/Tanzania), UNICEF/Tanzania, and the United Nations Population Fund (UNFPA/Tanzania). Technical assistance was provided by Macro International Inc. as part of the worldwide MEASURE Demographic and Health Surveys (*DHS*+) project, which is designed to collect, analyse, and disseminate data on fertility, family planning, maternal and child health, and HIV/AIDS.

[1] Data collection for the survey of health facilities was carried out as a separate but integrated operation, and the data will appear in a separate report.

SAMPLE DESIGN

The TRCHS used a three-stage sample design. Overall, 176 census enumeration areas were selected (146 on the Mainland and 30 in Zanzibar) with probability proportional to size on an approximately self-weighting basis on the Mainland, but with oversampling of urban areas and Zanzibar. To reduce costs and maximise the ability to identify trends over time, these enumeration areas were selected from the 357 sample points that were used in the 1996 TDHS, which in turn were selected from the 1988 census frame of enumeration in a two-stage process (first wards/branches and then enumeration areas within wards/branches). Before the data collection, fieldwork teams visited the selected enumeration areas to list all the households. From these lists, households were selected to be interviewed. The sample was designed to provide estimates for the whole country, for urban and rural areas separately, and for Zanzibar and, in some cases, Unguja and Pemba separately. The health facilities component of the TRCHS involved visiting hospitals, health centres, and pharmacies located in areas around the households interviewed. In this way, the data from the two components can be linked and a richer dataset produced.

QUESTIONNAIRES

The household survey component of the TRCHS involved three questionnaires: 1) a Household Questionnaire, 2) a Women's Questionnaire for all individual women age 15-49 in the selected households, and 3) a Men's Questionnaire for all men age 15-59. The health facilities survey involved six questionnaires: 1) a Community Questionnaire administered to men and women in each selected enumeration area; 2) a Facility Questionnaire; 3) a Facility Inventory; 4) a Service Provider Questionnaire; 5) a Pharmacy Inventory Questionnaire; and 6) a questionnaire for the District Medical Officers. All these instruments were based on model questionnaires developed for the MEASURE programme, as well as on the questionnaires used in the 1991-92 TDHS, the 1994 TKAP, and the 1996 TDHS. These model questionnaires were adapted for use in Tanzania during meetings with representatives from the Ministry of Health, the University of Dar es Salaam, the Tanzania Food and Nutrition Centre, USAID/Tanzania, UNICEF/Tanzania, UNFPA/Tanzania, and other potential data users. The questionnaires and manual were developed in English and then translated into and printed in Kiswahili.

The Household Questionnaire was used to list all the usual members and visitors in the selected households. Some basic information was collected on the characteristics of each person listed, including his/her age, sex, education, and relationship to the head of the household. The main purpose of the Household Questionnaire was to identify women and men who were eligible for individual interview and children under five who were to be weighed and measured. Information was also collected about the dwelling itself, such as the source of water, type of toilet facilities, materials used to construct the house, ownership of various consumer goods, and use of iodised salt. Finally, the Household Questionnaire was used to collect some rudimentary information about the extent of child labour.

The Women's Questionnaire was used to collect information from women age 15-49. These women were asked questions on the following topics:

- Background characteristics (age, education, religion, type of employment)
- Birth history
- Knowledge and use of family planning methods
- Antenatal, delivery, and postnatal care
- Breastfeeding and weaning practices
- Vaccinations, birth registration, and health of children under age five
- Marriage and recent sexual activity

- Fertility preferences
- Knowledge and behaviour concerning HIV/AIDS.

The Men's Questionnaire covered most of these same issues, except that it omitted the sections on the detailed reproductive history, maternal health, and child health. The final versions of the English questionnaires are provided in Appendix E.

Before the questionnaires could be finalised, a pretest was done in July 1999 in Kibaha District to assess the viability of the questions, the flow and logical sequence of the skip pattern, and the field organisation. Modifications to the questionnaires, including wording and translations, were made based on lessons drawn from the exercise.

TRAINING AND FIELDWORK

Competency was the guiding factor in recruiting interviewers. As with 1991-92, 1994, and 1996 surveys, the Ministry of Health was requested to secure the services of trained nurses to be interviewers in the 1999 TRCHS. A similar request was made to the Zanzibar Ministry of Health to provide nurses to serve as interviewers.

The training of field staff for the main survey was conducted over a three-week period from mid-August to the first week of September 1999, at the Golden Rose Hotel in Arusha Municipality. A total of 100 nurses were recruited and trained by experienced statisticians and demographers from the National Bureau of Statistics, with support from staff at Macro International Inc. and guest lecturers from the Arusha Regional Hospital and staff from the Tanzania Food and Nutrition Centre. Trial interviews were conducted in the nearby villages and in some parts of Arusha Municipality. Trainees also visited day care centres to gain experience in measuring children. Data processing staff participated in the training to acquaint themselves with the questionnaires. The training course consisted of instructions in interviewing techniques and field procedures, as well as a detailed review of items on the questionnaires. It also covered use of salt testing kits, weighing and measuring children, mock interviews between participants in the classroom, and practice interviews with real respondents in and around Arusha Municipality. During training, a series of assessment tests were given to the class. These tests were graded, and the results were used to select interviewers. Those who showed a high level of understanding of the questionnaires and were also able to detect errors in completed questionnaires were later chosen to be field editors.

Supervisors and editors participated in further training to discuss their duties and responsibilities. Ensuring data quality was emphasised. The supervisor was required to act as the leader of the field team and to be responsible for the well-being and safety of team members, as well as the completion of the assigned workload and the maintenance of data quality. Responsibilities of the editor included monitoring interviewer performance and checking all questionnaires for completeness and consistency. Close supervision of the interviewers and editing of completed questionnaires was emphasised to ensure accurate and complete data collection.

The fieldwork began the first week of September and continued until the third week of November 1999. Data collection for the 1999 TRCHS was implemented by ten teams, nine of which were composed of six female interviewers, one male interviewer, a field editor, a supervisor, and a driver. The tenth team was for quality control and was composed of a supervisor, two interviewers, and a driver. The list of persons who were involved in the survey is presented in Appendix D.

The quality control team visited all the teams to check the quality of their work by reviewing

completed questionnaires, observing interviews, and reinterviewing a subsample of households to check that the original interviews were completed and all eligible respondents were correctly identified. Problems found in one team were immediately communicated to other teams through the head office.

DATA PROCESSING

All the questionnaires for the TDHS were returned to the National Bureau of Statistics for data processing, which consisted of office editing, coding of open-ended questions, data entry, and editing of computer-identified errors. All data were processed on microcomputers and a software programme developed for DHS surveys, called the Integrated System for Survey Analysis (ISSA). The data processing staff for the survey consisted of eight data entry operators, one editor and two supervisors who were staff of the National Bureau of Statistics. Data entry was 100 percent verified. Office editing and data processing activities were initiated immediately after the beginning of fieldwork and were completed in mid-January 2000.

RESPONSE RATES

A summary of response rates from the household and individual interviews is shown in Table 1.2. In all, 3,826 households were selected for the sample, out of which 3,677 were occupied. Of the households found, 3,615 were interviewed, representing a response rate of 98 percent. The shortfall is primarily due to dwellings that were vacant or in which the inhabitants were not at home despite of several callbacks.

Table 1.2 Results of the household and individual interviews

Number of households, number of interviews, and response rates, by urban-rural residence, Tanzania 1999

Result	Residence		Total
	Urban	Rural	
Household interviews			
Households sampled	1,304	2,522	3,826
Households occupied	1,233	2,444	3,677
Households interviewed	1,192	2,423	3,615
Household response rate	96.7	99.1	98.3
Individual interviews: women			
Number of eligible women	1,446	2,672	4,118
Number of eligible women interviewed	1,418	2,611	4,029
Eligible woman response rate	98.1	97.7	97.8
Individual interviews: men			
Number of eligible men	1,367	2,425	3,792
Number of eligible men interviewed	1,250	2,292	3,542
Eligible man response rate	91.4	94.5	93.4

In the interviewed households, a total of 4,118 eligible women (i.e., women age 15-49) were identified for the individual interview, and 4,029 women were actually interviewed, yielding a response rate of 98 percent. A total of 3,792 eligible men (i.e., men age 15-59), were identified for the individual interview, of whom 3,542 were interviewed, representing a response rate of 93 percent. The principal reason for nonresponse among both eligible men and women was the failure to find them at home despite repeated visits to the household. The lower response rate among men than women was due to the more frequent and longer absences of men.

The response rates are lower in urban areas due to longer absence of respondents from their homes. One-member households are more common in urban areas and are more difficult to

interview because they keep their houses locked most of the time. In urban settings, neighbours often do not know the whereabouts of such people.

CHARACTERISTICS OF HOUSEHOLDS AND RESPONDENTS

2

The purpose of this chapter is to provide a short descriptive summary of some demographic and socioeconomic characteristics of the population in the sampled households and the individual respondents interviewed, such as age, sex, residence, and educational level. Also examined are environmental conditions such as housing facilities and household characteristics. This information on the characteristics of the households and the individual women and men interviewed is essential for the interpretation of survey findings and can provide an approximate indication of the representativeness of the survey.

For the purposes of the 1999 TRCHS, a household was defined as a person or a group of persons who live together and share a common source of food. The Household Questionnaire (see Appendix E) was used to collect information on all usual residents and visitors who spent the night preceding the interview in the household. This method of data collection allows the calculation of either *de jure* (usual residents) or *de facto* (those there at the time of the survey) populations.

2.1 POPULATION BY AGE AND SEX

The distribution of the household population in the TRCHS is shown in Table 2.1 by five-year age groups, according to sex and urban-rural residence. Because of relatively high levels of fertility in the past, Tanzania has a larger proportion of its population in the younger age groups than in the older age groups (Figure 2.1). This pattern is similar to the one observed in the censuses and the 1991-92 and 1996 TDHS surveys, except that the pattern is smoother in 1999. Most notable is the

Table 2.1 Household population by age, residence, and sex

Percent distribution of the de facto household population by five-year age group, according to urban-rural residence and sex, Tanzania 1999

	Urban			Rural			Total		
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	14.7	12.9	13.7	19.0	17.2	18.0	18.0	16.2	17.1
5-9	14.6	13.9	14.2	18.0	15.6	16.7	17.3	15.2	16.2
10-14	12.6	10.9	11.7	14.8	13.4	14.1	14.3	12.8	13.5
15-19	11.3	10.5	10.9	9.3	10.0	9.7	9.8	10.1	9.9
20-24	8.9	12.7	10.9	6.3	8.0	7.2	6.8	9.1	8.0
25-29	8.9	11.1	10.1	6.0	7.2	6.6	6.7	8.1	7.4
30-34	6.5	6.2	6.4	4.1	5.3	4.7	4.6	5.5	5.1
35-39	6.3	6.0	6.1	5.0	4.8	4.9	5.3	5.1	5.2
40-44	4.0	3.6	3.8	2.4	3.0	2.7	2.8	3.1	2.9
45-49	3.3	3.5	3.4	3.2	3.3	3.2	3.2	3.3	3.3
50-54	3.3	2.1	2.7	2.4	3.6	3.0	2.6	3.3	2.9
55-59	1.7	1.7	1.7	2.1	2.6	2.3	2.0	2.4	2.2
60-64	2.0	2.2	2.1	1.9	2.3	2.1	1.9	2.3	2.1
65-69	0.7	1.0	0.9	2.6	1.7	2.1	2.2	1.6	1.9
70-74	0.7	0.6	0.7	1.3	0.9	1.1	1.2	0.8	1.0
75-79	0.4	0.5	0.4	0.9	0.5	0.7	0.8	0.5	0.6
80 +	0.2	0.5	0.3	0.7	0.8	0.7	0.6	0.7	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,822	2,122	3,944	6,544	7,120	13,665	8,366	9,242	17,609

absence of the heaping of women's ages on 14 and 50 that was seen in the earlier surveys, which probably resulted from a deliberate tactic of interviewers to reduce their workload (see Table C.1).

Table 2.2 shows that the population structure by broad age groups is similar to that found in the 1967, 1978, and 1988 censuses as well as that observed in the 1991-92 and 1996 TDHS

Figure 2.1 Population Pyramid, Tanzania 1999

surveys. Just under half of the population is below age 15, with most of the other half in the 15-64 age group; the remaining 4 percent are age 65 and over. The population has a low median age of 16 years. Table 2.2 also shows the age dependency ratio, which is an indicator of the dependency responsibility of adults in their productive years. It is defined as the ratio of the total number of persons below age 15 and above age 65 divided by the number of persons age 15 to 64. In 1999, the dependency ratio was 104, which implies that there are 104 dependents for every 100 persons in the productive ages.

2.2 HOUSEHOLD COMPOSITION

Information about the composition of households by sex of the head of the household and size of the household is presented in Table 2.3. This table also shows the percentage of households with foster children. The data shows that men head 77 percent of households in Tanzania, similar to the level observed in the1996 TDHS (78 percent). Female-headed households are more common in urban (27 percent) than rural areas (22 percent). The average household size in Tanzania is 5 persons. Rural households are larger than urban households; the mean household size is 5.3 in rural areas and 4.3 in urban areas.

Table 2.2 Population by age from selected sources

Percent distribution of the population by age group, according to selected sources, Tanzania 1967-1999

Age group	1967 Census	1978 Census	1988 Census	1991-92 TDHS	1994 TKAPS	1996 TDHS	1999 TRCHS
<15	43.9	46.1	45.8	46.8	49.3	47.2	46.8
15-64	50.5	49.9	49.9	49.3	46.4	48.5	49.1
65+	5.6	4.0	4.3	3.9	4.3	4.3	4.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Median age	U	U	U	16.4	15.4	16.4	16.4
Dependency ratio	98	100	100	103	115	106	104

Sources: Bureau of Statistics, 1967-1999
U = Unknown (not available)

Table 2.3 Household composition

Percent distribution of households by sex of head of household, household size, and presence of foster children, according to urban-rural residence, Tanzania 1999

Characteristic	Residence		
	Urban	Rural	Total
Household headship			
Male	73.0	78.3	76.9
Female	27.0	21.7	23.1
Total	100.0	100.0	100.0
Number of usual members			
1	15.4	7.1	9.2
2	14.0	10.0	11.1
3	14.7	13.3	13.7
4	14.9	15.5	15.3
5	13.2	14.7	14.3
6	9.2	13.2	12.1
7	7.0	7.9	7.7
8	5.2	6.1	5.9
9+	6.4	12.2	10.7
Total	100.0	100.0	100.0
Mean size	4.3	5.3	5.0
Percentage of households with foster children	20.0	22.5	21.8

Note: Table is based on de jure members, i.e., usual residents. By convention, *foster* children are those who are not living with either biological parent. This includes *orphans,* i.e., children with both parents dead.

More than one-fifth (22 percent) of households have foster children, that is, children under age 15 living in a household with neither their biological mother nor father present. The high proportion of households with foster children certainly intensifies the economic burden on these households. With the current high prevalence of AIDS, the percentage of households with foster children in Tanzania is likely to rise.

2.3 FOSTERHOOD AND ORPHANHOOD

Information regarding fosterhood and orphanhood of children under age 15 is presented in Table 2.4. The table shows that 63 percent of children under 15 are living with both their biological parents, while 17 percent are living with their mothers (but not with their fathers), 5 percent are living with their fathers (but not with their mothers) and 14 percent are living with neither of their natural parents.

The table also provides data on the extent of orphanhood, that is, the proportion of children whose biological parents have both died. Of children under 15 years, 6 percent have lost their fathers and 3 percent have lost their mothers. One percent of children have lost both their natural parents (orphaned).

Table 2.4 Fosterhood and orphanhood

Percent distribution of de jure children under age 15 by survival status of parents and child's living arrangements, according to selected background characteristics, Tanzania 1999

Background characteristic	Living with both parents	Living with mother but not father		Living with father but not mother		Not living with either parent				Missing information on father/ mother	Total	Number of children
		Father alive	Father dead	Mother alive	Mother dead	Both alive	Father only alive	Mother only alive	Both dead			
Age												
<2	75.2	19.9	1.4	0.3	0.2	2.4	0.2	0.0	0.0	0.4	100.0	1,862
3-5	70.1	13.0	2.3	2.7	0.1	9.2	0.8	0.8	0.3	0.7	100.0	1,725
6-9	58.4	12.5	3.6	5.8	1.2	11.5	1.7	2.4	1.4	1.5	100.0	2,319
10-14	51.4	11.2	5.6	7.0	1.9	12.9	2.1	3.7	2.1	2.1	100.0	2,388
Sex												
Male	63.0	13.6	3.2	4.8	0.8	8.6	1.3	1.9	1.4	1.4	100.0	4,204
Female	62.2	14.1	3.6	3.7	1.1	10.1	1.2	1.9	0.7	1.2	100.0	4,091
Residence												
Urban	55.8	16.3	3.3	6.5	1.1	10.7	1.7	2.1	1.0	1.6	100.0	1,598
Rural	64.2	13.3	3.4	3.8	0.9	9.1	1.2	1.9	1.1	1.2	100.0	6,697
Mainland/Zanzibar												
Mainland	62.6	13.9	3.4	4.3	1.0	9.3	1.3	1.9	1.1	1.3	100.0	8,071
Urban	55.5	16.4	3.2	6.6	1.1	10.7	1.7	2.1	1.0	1.6	100.0	1,536
Rural	64.2	13.3	3.5	3.8	1.0	9.0	1.2	1.9	1.1	1.2	100.0	6,534
Zanzibar	64.1	14.2	2.7	3.2	0.0	11.2	0.8	1.8	0.4	1.5	100.0	224
Pemba	67.7	12.7	3.1	4.0	0.1	8.9	0.5	2.0	0.4	0.7	100.0	110
Unguja	60.7	15.6	2.4	2.5	0.0	13.4	1.2	1.6	0.4	2.2	100.0	114
Total	62.6	13.9	3.4	4.3	1.0	9.4	1.3	1.9	1.1	1.3	100.0	8,294

Note: By convention, *foster* children are those who are not living with either biological parent. This includes *orphans,* i.e., children with both parents dead.

Differentials in fosterhood and orphanhood are not large. Obviously, younger children are more likely than older children to be living with one or both parents, and their parents are more likely to be living. Also, children in Zanzibar are less likely to be orphaned than children in the Mainland.

2.4 EDUCATION LEVEL OF HOUSEHOLD POPULATION

Education is a key determinant of the life style and status an individual enjoys in a society. It affects many aspects of human life, including demographic and health behaviour. Studies have consistently shown that educational attainment has strong effects on reproductive behaviour, contraceptive use, fertility, infant and child mortality, morbidity, and issues related to family health and hygiene.

In the 1999 TRCHS, information on educational attainment was collected for every member of the household. Tables 2.5.1 and 2.5.2 show the percent distribution of the de facto female and male population ages six and older, by the highest level of education attended and the median of years of schooling completed, according to selected background characteristics.

Table 2.5.1 Educational level of the female household population

Percent distribution of the de facto female household population age six and over by highest level of education attended, and median number of years of schooling, according to selected background characteristics, Tanzania 1999

Background characteristic	Level of education					Median years of schooling	Number of females
	No education	Primary incomplete	Completed primary	Some secondary or higher	Total		
Age							
6-9	64.1	35.3	0.0	0.5	100.0	0.0	1,118
10-14	25.6	72.8	1.3	0.2	100.0	1.3	1,185
15-19	19.7	35.9	38.9	5.4	100.0	5.2	931
20-24	17.0	15.8	60.9	6.3	100.0	6.3	838
25-29	17.0	13.4	63.0	6.6	100.0	6.3	749
30-34	21.5	16.7	55.1	6.7	100.0	6.2	511
35-39	39.6	16.9	40.0	3.6	100.0	3.7	468
40-44	52.3	17.2	25.3	5.2	100.0	0.0	287
45-49	64.6	24.8	7.2	3.3	100.0	0.0	310
50-54	75.4	18.9	4.9	0.8	100.0	0.0	302
55-59	76.8	15.3	2.5	5.3	100.0	0.0	219
60-64	85.9	9.4	1.6	3.0	100.0	0.0	211
65+	87.8	8.0	1.8	2.4	100.0	0.0	331
Residence							
Urban	22.7	31.0	37.0	9.3	100.0	4.7	1,792
Rural	45.5	29.9	22.8	1.7	100.0	0.0	5,669
Mainland/Zanzibar							
Mainland	40.1	30.1	26.6	3.2	100.0	1.1	7,266
Urban	22.7	30.9	37.9	8.5	100.0	4.8	1,731
Rural	45.5	29.8	23.1	1.5	100.0	0.0	5,535
Zanzibar	37.8	34.4	10.1	17.7	100.0	1.2	195
Pemba	44.8	35.1	7.8	12.3	100.0	0.0	87
Unguja	32.2	33.8	11.9	22.1	100.0	2.5	107
Total	40.1	30.2	26.2	3.6	100.0	1.1	7,461

There is a strong differential in educational attainment between the sexes, especially as age increases. Overall, 40 percent of women in Tanzania have never been to school, compared with 31 percent of men (Figure 2.2). The proportion with no education increases with age. For example, the proportion of women who have never attended any formal schooling increases from 17 percent in age group 20-24 to 88 percent among those age 65 and older. For men, the proportion increases from 11 percent (age group 15-19) to 66 percent (age group 65 and older). Thirty percent of women and 34 percent of men have completed primary school, with just under 5 percent having attended some secondary school. The median number of years of schooling is 1.1 for women and 2.6 for men.

Overall, educational attainment is higher in urban areas than in rural areas. The proportion of women and men with no education in urban areas is half that of rural areas. Conversely, the percentage with primary and secondary education is higher for urban than for rural women and men.

Table 2.5.2 Educational level of the male household population

Percent distribution of the de facto male household population age six and over by highest level of education attended, and median number of years of schooling, according to selected background characteristics, Tanzania 1999

Background characteristic	Level of education					Median years of schooling	Number of males
	No education	Primary incomplete	Completed primary	Some secondary or higher	Total		
Age							
6-9	72.8	26.4	0.0	0.7	100.0	0.0	1,171
10-14	24.6	73.7	1.3	0.4	100.0	1.0	1,197
15-19	11.4	41.0	42.9	4.7	100.0	5.3	818
20-24	11.3	17.5	62.3	8.9	100.0	6.3	571
25-29	10.1	14.9	67.1	7.9	100.0	6.4	557
30-34	9.3	15.4	65.0	10.3	100.0	6.4	385
35-39	10.7	15.0	62.8	11.5	100.0	6.4	443
40-44	22.1	27.0	40.2	10.6	100.0	6.0	231
45-49	28.6	36.1	29.5	5.7	100.0	3.5	267
50-54	25.9	42.3	25.0	6.8	100.0	3.6	217
55-59	33.1	53.4	10.9	2.6	100.0	3.3	167
60-64	45.3	43.7	6.8	4.3	100.0	1.1	161
65+	65.6	25.0	6.9	2.5	100.0	0.0	398
Residence							
Urban	16.4	36.1	34.9	12.6	100.0	4.7	1,508
Rural	34.9	35.5	27.2	2.4	100.0	1.9	5,074
Mainland/Zanzibar							
Mainland	30.7	35.5	29.4	4.4	100.0	2.6	6,416
Urban	16.4	36.0	35.6	12.0	100.0	4.7	1,456
Rural	34.9	35.3	27.6	2.2	100.0	1.9	4,960
Zanzibar	28.8	41.3	11.6	18.3	100.0	2.4	166
Pemba	34.9	43.3	7.7	14.0	100.0	1.0	74
Unguja	23.8	39.7	14.8	21.7	100.0	3.7	92
Total	30.7	35.6	29.0	4.7	100.0	2.6	6,582

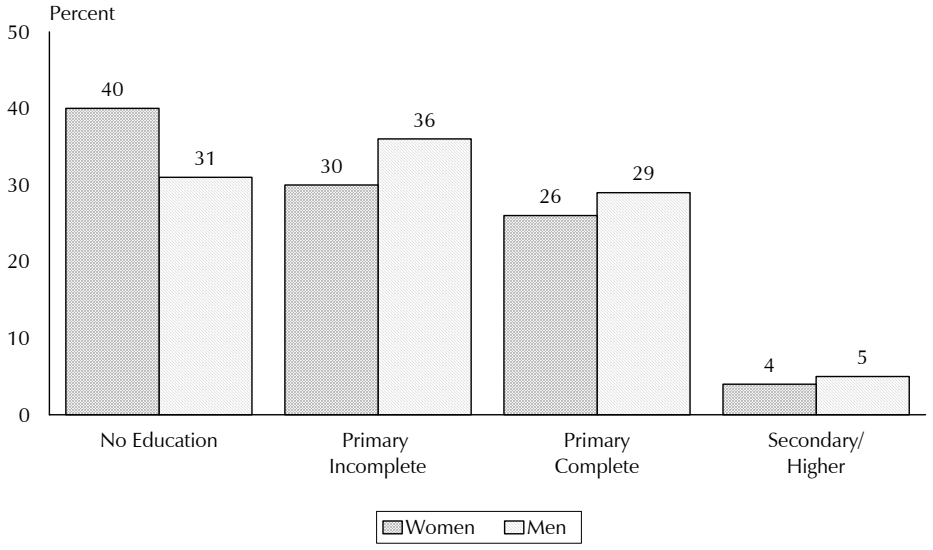
Educational attainment is higher in Zanzibar than in the Mainland. For example, although the proportions of both women and men with no education are only slightly lower in Zanzibar than in the Mainland, the proportions with at least some secondary school are far higher in Zanzibar than in the Mainland. This difference in educational attainment is because compulsory education in Zanzibar incorporates three years of secondary education.

2.5 SCHOOL ATTENDANCE

The 1999 TRCHS collected more detailed information about school attendance than previous surveys. The survey also included information about early childhood education programs.

Table 2.6 presents data on the proportion of children age 3 and 4 years listed on the Household Questionnaire who are attending some form of early childhood education (nursery school, kindergarten). Less than 3 percent of children age 36-59 months were reported to be attending some sort of school. As might be expected, pre-school education coverage is higher among

Figure 2.2 Level of Education for Women and Men, Tanzania 1999



TRCHS 1999

urban children, among children age 4, and among children whose mothers have some secondary education.

Table 2.7 and Figure 2.3 present the percentage of the primary-school-age population (ages 7-13) who are currently attending primary school by age, sex, and urban-rural residence. These percentages are also referred to as net attendance ratios. As shown in the table, attendance ratios are low in Tanzania, with only slightly more than half of primary-school-age children attending primary school. Girls are more likely than boys to be attending school (56 versus 51 percent), which shows that the overall low attendance rate is not due to keeping girls out of school. Attendance is higher for children in Zanzibar than for those in the Mainland (67 versus 53 percent). It is also higher for urban than for rural children and for older children. That attendance ratios are substantially higher at ages 11-13 than at 7-10 implies that many children start school late.

2.6 CHILD LABOUR

In many societies, poor families cannot afford to send their children to school because the child's labour is a valuable asset to the family. Despite policies and sometimes laws designed to eliminate child labour, the practice continues in many countries. In order to measure the extent of child labour in Tanzania, the 1999 TRCHS asked a series of questions about all children age 5-14. Questions included whether the child was doing any kind of work for pay, whether he/she regularly did unpaid family work on the farm or in a family business, and whether the child regularly helped with household chores at home, like cleaning, caring for animals, or cooking. The results are shown in Table 2.8. Caution should be used in interpreting these data, as the rather lengthy questions usually recommended by labour experts could not be accommodated in this particular survey.

It is encouraging to note that only a tiny fraction (less than 2 percent) of Tanzanian children age 5-14 are working for pay. However, more than one in five children are doing unpaid work in a family business, and almost four out of five regularly help out with domestic chores. One-quarter

Table 2.6 Early childhood education

Percentage of de facto children age 36-59 months who are attending some form of organised early childhood education (ECE), by selected background characteristics, Tanzania 1999

Background characteristic	Percentage attending ECE programme	Number of children
Child's age		
36-47 months	0.9	560
48-59 months	3.9	588
Sex		
Male	1.8	554
Female	3.1	594
Residence		
Urban	10.1	197
Rural	0.8	952
Mainland/Zanzibar		
Mainland	2.4	1,116
Urban	10.4	188
Rural	0.8	928
Zanzibar	3.0	32
Pemba	2.3	16
Unguja	3.6	16
Mother's education		
No education	0.0	287
Primary incomplete	0.5	153
Primary complete	3.3	477
Secondary+	(18.6)	27
Missing	3.0	204
Total	2.4	1,148

Note: Figures in parentheses are based on 25-49 unweighted cases

of children spend four or more hours a day in domestic chores. As expected, older children, rural children and, to a lesser extent, male children are more likely to be working. Children in Zanzibar are far less likely than children in the Mainland to be working, especially doing unpaid family work or domestic chores.

2.7 HOUSING CHARACTERISTICS

Socioeconomic conditions in Tanzania were assessed by asking respondents about their household environment, e.g., their access to electricity, sources of drinking water, time to water sources, type of toilet facilities, and floor materials. This information is summarised in Table 2.9.

As the table shows, only 8 percent of households in Tanzania have electricity. Electricity is much more common in urban areas; 27 percent of urban households have electricity, compared with only 1 percent of rural households.

The source of drinking water is important because waterborne diseases, including diarrhoea and dysentery, are prevalent in the country. Sources of water expected to be relatively free of these diseases are piped water, protected wells, tube wells, and protected springs. Other sources, like unprotected wells, rivers and streams, and ponds and lakes, are more likely to carry the bacteria that cause these diseases. Table 2.9 shows that about two-thirds of Tanzanian households have safe drinking water; 38 percent of all households have access to piped water, while 28 percent get their drinking water from other relatively safe sources—protected dug wells, tube wells, or protected springs. One-third of all households rely on sources of drinking water that are less safe, such as unprotected wells and springs and surface water from ponds and rivers. As expected, a far greater proportion of urban than rural households have safe sources of drinking water (92 versus 56 percent). In urban areas, 62 percent of the households have access to water within 15 minutes, compared with 26 percent of rural households.

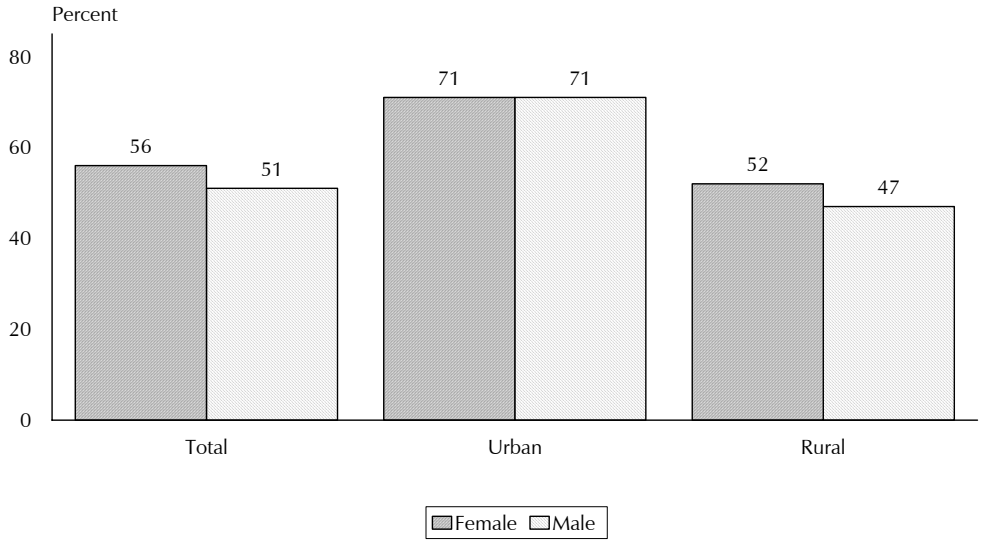
Modern sanitation facilities are not yet available to a large proportion of Tanzanian households. The use of traditional pit toilets is still common in both urban and rural areas, accounting for 86 percent of all households. Households with no toilet facilities are more exposed to the risk of diseases such as dysentery, diarrhoea, and typhoid fever. Overall, about 12 percent of the households in Tanzania have no toilet facilities. This problem is more common in rural areas, where 16 percent of the households have no toilet facilities, compared with 1 percent of households in urban areas.

Table 2.7 School attendance ratios

Percentage of de facto children of primary school age (7-13) attending primary school, by selected background characteristics, Tanzania 1999

Background characteristic	Males		Females		Total	
	Attending	Number	Attending	Number	Attending	Number
Age						
7-8 years	27.0	581	34.8	582	30.9	1,163
9-10 years	48.1	521	54.5	528	51.3	1,050
11-12 years	72.6	487	73.4	495	73.0	982
13 years	72.2	269	71.2	250	71.7	519
Residence						
Urban	71.0	336	71.3	367	71.1	703
Rural	47.1	1,522	51.7	1,488	49.4	3,010
Mainland/Zanzibar						
Mainland	51.0	1,809	55.2	1,801	53.1	3,610
Urban	70.6	323	70.8	352	70.7	675
Rural	46.8	1,486	51.4	1,449	49.1	2,935
Zanzibar	65.5	49	68.1	54	66.9	103
Pemba	63.2	27	61.8	26	62.5	53
Unguja	68.5	21	73.8	28	71.5	50
Total	51.4	1,858	55.6	1,855	53.5	3,713

Figure 2.3 Percentage of Children Age 7-13 Attending Primary School, by Sex and Residence



TRCHS 1999

Table 2.8 Child labour

Percentage of de facto children 5-14 years of age who are currently working, by selected background characteristics Tanzania 1999

Background characteristic	Currently doing work for pay	Currently doing unpaid family work on a farm or business	Currently doing domestic work for:		Currently working[1]	Number of children
			Less than 4 hours per day	4 or more hours per day		
Age						
5-9	0.4	8.3	47.1	18.2	24.1	2,850
10-14	3.0	38.1	60.1	33.7	60.2	2,382
Sex						
Male	2.0	23.6	49.6	25.8	42.6	2,643
Female	1.2	20.1	56.6	24.8	38.4	2,589
Residence						
Urban	1.9	12.6	55.3	17.8	28.0	1,023
Rural	1.5	24.1	52.5	27.1	43.6	4,209
Mainland/Zanzibar						
Mainland	1.6	22.4	52.9	25.8	41.3	5,086
Urban	1.9	13.0	55.0	18.3	28.7	984
Rural	1.5	24.7	52.4	27.6	44.3	4,102
Zanzibar	3.8	3.4	58.2	8.3	13.4	145
Pemba	5.0	2.8	57.9	10.7	15.4	74
Unguja	2.6	4.0	58.4	5.8	11.3	71
Total	1.6	21.9	53.0	25.3	40.5	5,231

[1] "Working"means either doing paid or unpaid work or doing domestic work for four or more hours a day.

The type of material used for flooring is an indicator not only of the quality of housing but also of health risk. Overall, 79 percent of all households in Tanzania live in residences with floors made of earth or sand, while 21 percent live in houses with cement floors. Earth flooring is almost universal in rural areas (93 percent). In general, rural households have poorer quality floors than urban households.

Respondents were also asked about their household's ownership of particular durable goods. Besides providing an indicator of socioeconomic status, ownership of these goods provides measures of other aspects of life. Ownership of a radio and a television is a measure of access to mass media; refrigerator ownership indicates a capacity for more hygienic food storage; and ownership of a bicycle, motorcycle, or a private car shows the means of transport available to households. Information on ownership of these items is presented in Table 2.10.

Possession of durable goods is not common in Tanzania because many households cannot afford them. Nationally, only 43 percent of households own a radio and only 2 percent of households own a television. Refrigerators are also uncommon; only 2 percent of households have a refrigerator. Bicycles are the most common type of transportation owned by households; almost one-third of households have a bicycle. Ownership of motorised transportation is extremely rare. Only 1 percent of households have a car and even fewer have a motorcycle. As expected, urban

Table 2.9 Housing characteristics

Percent distribution of households by housing characteristics, according to urban-rural residence, Tanzania 1999

Characteristic	Residence		
	Urban	Rural	Total
Electricity			
No	72.6	98.7	91.9
Yes	27.3	1.1	8.0
Missing	0.1	0.2	0.2
Source of drinking water			
Piped into residence	9.0	1.0	3.1
Piped into yard	39.2	3.1	12.6
Public tap	31.9	18.2	21.8
Unprotected well	2.2	18.4	14.2
Protected dug well	5.2	18.5	15.0
Borehole or tube well	6.0	10.4	9.2
Protected spring	0.8	5.1	4.0
Unprotected spring	0.9	8.2	6.3
Pond, river, stream	1.9	16.9	13.0
Tanker truck	2.7	0.1	0.8
Time to water source (in minutes)			
<15 minutes (percent)	61.7	25.5	35.0
Median time to source	4.1	29.1	19.6
Sanitation facilities			
Flush toilet	4.1	0.6	1.5
Traditional pit toilet	91.5	83.4	85.5
Vent. imp. pit latrine	3.2	0.2	1.0
No facilities/bush	1.1	15.8	12.0
Floor material			
Earth/sand	37.2	93.4	78.7
Cement	62.6	6.4	21.1
Other	0.2	0.2	0.1
Total	100.0	100.0	100.0
Number of households	946	2,669	3,615

households are more likely than rural house holds to own all the items listed, except for bicycles. For example, two-thirds of urban households have radios, compared with only one-third of rural households. Half the rural households surveyed do not possess any of the items listed, compared with only 27 percent of urban households.

Ownership of radios, televisions, and bicycles has hardly changed since 1996. The only item that shows any appreciable change is the radio; the proportion of households with a radio has increased from 41 to 43 percent.

Another household characteristic measured in the TRCHS was the use of iodised salt. Iodine deficiency in the diet can lead to serious nutritional deficiencies that can result in health problems such as goitre, stunting, mental retardation, and cretinism. The government of Tanzania has emphasised the addition of iodine to salt to prevent these health problems. Interviewers asked household respondents for a teaspoon of salt that was used for cooking. They then tested the salt for iodine content using portable test kits. Interviewers succeeded in testing the salt in 97 percent of households.

As shown in Table 2.11, two-thirds of households were found to have an adequate level of iodisation, while the salt used by one-third of the households was not iodised.[1] Urban households and those in the Mainland are more likely to use iodised salt. Health officials should make efforts to improve the situation in Pemba, where less than 10 percent of households use iodised salt.

2.8 Background Characteristics of Respondents

Table 2.12 shows the distribution of children under five by selected background characteristics. As expected, there are an equal number of boys and girls under five listed in the Household Questionnaire. They have a similar distribution by place of residence as the general population, i.e., 97 percent live in the Mainland and 3 percent live in Zanzibar. However, children under five are somewhat less urbanised than the general population, with less than 20 percent living in urban areas, compared with about 22 percent of the general population.

[1] Salt that contains at least 15 parts per million of iodine is considered to be adequately iodised.

Table 2.10 Household durable goods

Percentage of households possessing various durable consumer goods, by urban-rural residence, Tanzania 1999

Durable good	Residence		
	Urban	Rural	Total
Radio	66.9	34.7	43.2
Television	8.5	0.2	2.4
Refrigerator	7.1	0.2	2.0
Bicycle	27.3	34.1	32.3
Motorcycle	1.5	0.5	0.7
Private car or truck	3.6	0.2	1.1
None of the above	26.9	49.5	43.6
Number of households	946	2,669	3,615

Table 2.13 shows the distribution of female and male respondents by selected background characteristics. To assess their age, respondents were asked two questions in the individual interview: "In what month and year were you born?" and "How old were you at your last birthday?" Interviewers were trained to probe in situations in which respondents did not know their age or date of birth, and they were instructed to record their best estimate of the respondent's age as a last resort. Results show the same steep drop-off with age seen in the general population, which is indicative of a high fertility population.

As with children under five, the vast majority of women and men live in the Mainland (98 percent), while only 3 percent live in Zanzibar. Twenty-eight percent of women and 27 percent of men live in urban areas.

Data on marital status at the time of the survey show that 23 percent of women age 15-49 and 36 percent of men age 15-59 have never married; 66 percent of women and 58 percent of men were currently in unions; and 11 percent of women and 5 percent of men were divorced, separated, or widowed.

Table 2.11 Iodised salt

Percent distribution of households by whether salt was tested for iodine and, among those tested, percent distribution by iodine content, according to selected background characteristics, Tanzania 1999

Background characteristic	Salt testing in households			Among households tested, percentage with iodine level:				
	Percentage tested	Percentage not tested	Total	0 ppm (no iodine)	25 ppm	50 ppm or more	Total	Number of households
Residence								
Urban	95.3	4.7	100.0	13.9	8.3	77.8	100.0	946
Rural	97.0	3.0	100.0	40.0	14.7	45.3	100.0	2,669
Mainland/Zanzibar								
Mainland	96.7	3.3	100.0	32.4	13.2	54.4	100.0	3,526
Urban	95.4	4.6	100.0	12.6	8.3	79.0	100.0	920
Rural	97.2	2.8	100.0	39.3	14.9	45.8	100.0	2,605
Zanzibar	92.2	7.8	100.0	66.5	6.9	26.6	100.0	89
Pemba	94.3	5.7	100.0	90.9	1.6	7.5	100.0	38
Unguja	90.7	9.3	100.0	48.0	11.0	41.0	100.0	52
Total	96.6	3.4	100.0	33.2	13.0	53.7	100.0	3,615

ppm = parts per million

Table 2.12 Background characteristics of children under five

Percent distribution of de facto children under age five by selected background characteristics, Tanzania 1999

Background characteristic	Weighted percent	Number of children	
		Weighted	Un-weighted
Child's age			
< 6 months	11.3	338	339
6-11 months	10.6	318	302
12-23 months	20.0	597	575
24-35 months	19.9	594	584
36-47 months	18.7	559	579
48-59 months	19.5	584	554
Sex			
Male	50.4	1,506	1,473
Female	49.6	1,484	1,460
Residence			
Urban	17.9	535	750
Rural	82.1	2,455	2,183
Mainland/Zanzibar			
Mainland	97.3	2,910	2,183
Urban	17.1	513	508
Rural	80.2	2,397	1,675
Zanzibar	2.7	80	750
Pemba	1.3	40	339
Unguja	1.4	41	411
Mother's education			
No education	25.5	762	723
Primary incomplete	14.8	442	456
Primary complete	45.8	1,368	1,126
Secondary+	3.4	101	302
Missing	10.6	316	326
Total	100.0	2,990	2,933

The proportion of women who have never attended school is almost twice that of men (27 versus 14 percent). Just under half of women and just over half of men have completed primary education only, while 5 percent of women and 7 percent of men have gone beyond primary education.

One-third of women and men are Muslim, an almost equal proportion are Catholic, one-fourth are Protestants, and 13 percent adhere to traditional religions or have no religion.

2.9 Educational Level of Survey Respondents

Tables 2.14.1 and 2.14.2 present the distribution of women and men by level of education, according to selected characteristics. As mentioned earlier, men are generally better educated than women. While 27 percent of women age 15-49 have had no formal education, only 14 percent of men age 15-59 have had no schooling. The proportion of respondents who have had some secondary education is higher among men than among women. Education is inversely related to age; older women and men are generally less educated than younger women and men. The percentage of women with no education rises with age, from 20 percent or less among women in their 20s and early 30s to 67 percent among women in the age group 45-49. This differential in education means that younger women and men have had better educational opportunities than older people. The correlation is also reflected in the higher percentage of women in the age group 20-24 who completed primary education (67 percent), compared with women age 45-49 (9 percent).

Urban women and men are much more likely than rural women and men to go to school. Thirty-three percent of rural women have no education, compared with only 13 percent of urban women. Conversely, 69 percent of urban women have completed primary education and 13 percent have been to secondary school, while 45 percent of rural women completed primary education and only 2 percent have been to secondary school. Similar patterns exist for the men.

At least in part as a result of the difference in the secondary education system between the Mainland and Zanzibar, a higher proportion of women with some secondary education is observed in Zanzibar (34 percent), compared with the Mainland (5 percent). The proportion of men with some secondary education is also higher in Zanzibar (34 percent) than in the Mainland (7 percent).

Table 2.13 Background characteristics of respondents

Percent distribution of women and men by selected background characteristics, Tanzania 1999

Background characteristic	Women			Men		
		Number of women			Number of men	
	Weighted percent	Weighted	Un-weighted	Weighted percent	Weighted	Un-weighted
Age						
15-19	22.6	909	933	22.3	790	803
20-24	20.1	811	773	15.2	540	550
25-29	18.6	749	751	15.4	546	530
30-34	12.2	490	491	10.5	371	367
35-39	11.3	456	491	12.6	445	451
40-44	7.4	299	301	6.2	219	250
45-49	7.8	315	289	7.3	259	249
50-54	NA	NA	NA	5.7	201	185
55-59	NA	NA	NA	4.8	171	157
Residence						
Urban	27.9	1,122	1,418	26.6	941	1,250
Rural	72.1	2,907	2,611	73.4	2,601	2,292
Mainland/Zanzibar						
Mainland	97.5	3,929	3,060	97.5	3,452	2,673
Urban	27.0	1,088	1,036	25.7	909	898
Rural	70.5	2,841	2,024	71.8	2,543	1,775
Zanzibar	2.5	100	969	2.5	90	869
Pemba	1.1	44	396	1.0	36	316
Unguja	1.4	56	573	1.5	55	553
Marital status						
Never married	23.4	943	977	36.4	1,289	1,344
Married	58.5	2,357	2,369	54.6	1,936	1,874
Living together	7.3	295	239	3.6	128	124
Widowed	3.2	128	126	0.8	29	29
Divorced	3.5	140	185	1.8	64	71
Not living together	4.1	165	133	2.7	97	100
Education						
No education	27.1	1,093	1,026	14.0	495	479
Primary incomplete	21.2	854	821	28.2	1,000	966
Primary complete	46.3	1,866	1,640	50.6	1,791	1,566
Secondary+	5.3	215	542	7.2	256	531
Religion						
Muslim	32.6	1,315	1,940	32.6	1,153	1,710
Catholic	30.0	1,208	974	31.1	1,103	892
Protestant	24.2	975	759	22.1	784	578
Traditional or no religion	12.9	520	344	13.4	475	336
Other	0.3	11	12	0.7	27	26
Total	100.0	4,029	4,029	100.0	3,542	3,542

NA = Not applicable

Table 2.14.1 Level of education: women

Percent distribution of women by the highest level of education attended, according to selected background characteristics, Tanzania 1999

Background characteristic	Level of education: women					Number of women
	No education	Primary incomplete	Primary complete	Secondary+	Total	
Age						
15-19	20.8	35.0	39.1	5.1	100.0	909
20-24	17.3	15.8	60.7	6.3	100.0	811
25-29	16.1	14.5	62.3	7.1	100.0	749
30-34	20.0	16.9	56.9	6.3	100.0	490
35-39	38.9	18.8	39.1	3.2	100.0	456
40-44	53.1	18.3	24.3	4.3	100.0	299
45-49	66.5	24.5	7.1	1.9	100.0	315
Residence						
Urban	13.2	17.4	56.1	13.3	100.0	1,122
Rural	32.5	22.7	42.5	2.3	100.0	2,907
Mainland/Zanzibar						
Mainland	27.1	21.2	47.1	4.6	100.0	3,929
Urban	13.2	17.4	57.3	12.0	100.0	1,088
Rural	32.4	22.7	43.1	1.8	100.0	2,841
Zanzibar	28.4	20.3	17.5	33.8	100.0	100
Pemba	39.3	23.3	14.3	23.2	100.0	44
Unguja	19.8	18.0	20.1	42.1	100.0	56
Total	27.1	21.2	46.3	5.3	100.0	4,029

Table 2.14.2 Level of education: men

Percent distribution of men by the highest level of education attended, according to selected background characteristics, Tanzania 1999

Background characteristic	Level of education: men					Number of men
	No education	Primary incomplete	Primary complete	Secondary+	Total	
Age						
15-19	11.6	42.8	41.1	4.5	100.0	790
20-24	11.0	19.1	62.6	7.4	100.0	540
25-29	8.7	16.1	65.5	9.7	100.0	546
30-34	9.6	14.8	66.6	8.9	100.0	371
35-39	10.4	16.0	63.1	10.5	100.0	445
40-44	16.8	28.8	43.0	11.5	100.0	219
45-49	26.7	35.4	34.1	3.8	100.0	259
50-54	27.0	46.6	21.4	4.9	100.0	201
55-59	32.3	56.5	9.8	1.4	100.0	171
Residence						
Urban	7.0	21.8	54.1	17.0	100.0	941
Rural	16.5	30.5	49.3	3.7	100.0	2,601
Mainland/Zanzibar						
Mainland	13.9	28.2	51.4	6.5	100.0	3,452
Urban	7.0	21.9	55.2	15.9	100.0	909
Rural	16.4	30.5	50.0	3.2	100.0	2,543
Zanzibar	17.6	28.6	19.6	34.2	100.0	90
Pemba	26.2	29.6	13.5	30.6	100.0	36
Unguja	11.9	28.0	23.6	36.5	100.0	55
Total	14.0	28.2	50.6	7.2	100.0	3,542

The level of literacy is often viewed as an indicator of the basic level of socioeconomic development of a country. In the TRCHS, women age 15-49 and men age 15-59 who were interviewed individually were asked to read a simple sentence in Swahili. Interviewers then coded their reading ability on the questionnaire. This small literacy test marks a departure from previous surveys in which respondents were asked whether they could read. Table 2.15 shows the percent distribution of both women and men by level of literacy according to background characteristics.

Table 2.15 Literacy

Percent distribution of women and men by literacy level, according to selected background characteristics, Tanzania 1999

	Women						Men					
Background characteristic	Cannot read at all	Can read part of sentence	Can read whole sentence	Refused	Total	Number of women	Cannot read at all	Can read part of sentence	Can read whole sentence	Refused	Total	Number of men
Age												
15-19	31.1	6.5	62.2	0.1	100.0	909	25.2	10.8	63.6	0.4	100.0	790
20-24	27.3	5.0	67.6	0.1	100.0	811	20.7	5.4	72.2	1.7	100.0	540
25-29	25.9	7.5	66.6	0.0	100.0	749	21.2	5.4	73.3	0.0	100.0	546
30-34	29.8	7.0	63.1	0.1	100.0	490	16.9	4.4	78.5	0.2	100.0	371
35-39	46.9	7.7	45.3	0.1	100.0	456	16.4	4.3	79.4	0.0	100.0	445
40-44	56.3	8.8	33.3	1.6	100.0	299	18.9	5.5	75.5	0.0	100.0	219
45-49	69.4	7.0	23.2	0.4	100.0	315	27.0	6.8	66.1	0.0	100.0	259
50-54	NA	NA	NA	NA	NA	NA	26.1	8.2	64.6	1.1	100.0	201
55-59	NA	NA	NA	NA	NA	NA	32.7	11.3	55.9	0.1	100.0	171
Residence												
Urban	19.3	5.0	75.3	0.5	100.0	1,122	11.1	3.4	84.3	1.2	100.0	941
Rural	42.3	7.5	50.1	0.1	100.0	2,907	26.0	8.2	65.6	0.2	100.0	2,601
Mainland/Zanzibar												
Mainland	36.0	6.8	57.0	0.2	100.0	3,929	22.2	6.8	70.6	0.4	100.0	3,452
Urban	19.4	5.0	75.1	0.4	100.0	1,088	11.1	3.3	84.4	1.2	100.0	909
Rural	42.3	7.5	50.1	0.1	100.0	2,841	26.1	8.1	65.6	0.1	100.0	2,543
Zanzibar	30.9	7.1	60.7	1.3	100.0	100	18.8	10.4	69.2	1.7	100.0	90
Pemba	42.6	9.2	46.9	1.3	100.0	44	23.8	13.5	61.3	1.4	100.0	36
Unguja	21.8	5.5	71.4	1.3	100.0	56	15.5	8.4	74.2	1.9	100.0	55
Education												
No education	95.9	1.3	2.7	0.0	100.0	1,093	86.1	4.1	9.7	0.1	100.0	495
Primary incomplete	31.1	15.5	52.6	0.8	100.0	854	24.4	14.1	60.6	0.9	100.0	1,000
Primary complete	7.0	6.8	86.1	0.1	100.0	1,866	6.2	4.7	88.8	0.3	100.0	1,791
Secondary+	0.0	0.0	100.0	0.0	100.0	215	0.0	0.0	100.0	0.0	100.0	256
Total	35.9	6.8	57.1	0.2	100.0	4,029	22.1	6.9	70.6	0.4	100.0	3,542

Note: Respondents who reached secondary school were not tested but were assumed to be able to read the whole sentence.
NA = Not applicable

Illiteracy is high among women, compared with men. Thirty-six percent of all women respondents are illiterate, compared with only 22 percent of men. Seven percent of all women could read only part of the sentence and 57 percent of all women could read the whole sentence. Among men, 7 percent could read part of the sentence and 71 percent could read the whole sentence. As expected, illiteracy rates are higher in rural than in urban areas and among the less educated population. For both sexes, illiteracy is slightly higher in the Mainland than in Zanzibar.

Table 2.16 Access to mass media

Percentage of women and men who usually read a newspaper once a week, watch television once a week, or listen to the radio weekly, by selected background characteristics, Tanzania 1999

Background characteristic	Women						Men					
	No mass media	Read news-paper weekly	Watch tele-vision weekly	Listen to radio weekly	All three media	Number of women	No mass media	Read news-paper weekly	Watch tele-vision weekly	Listen to radio weekly	All three media	Number of men
Age												
15-19	72.4	4.1	4.1	23.4	0.3	909	58.4	7.3	9.2	36.4	2.0	790
20-24	67.4	5.8	5.6	30.3	2.0	811	44.0	14.4	14.4	50.6	4.5	540
25-29	66.4	8.1	4.7	29.9	1.6	749	45.2	19.5	7.4	50.4	3.3	546
30-34	69.7	4.2	4.0	27.1	0.2	490	46.1	16.9	8.3	48.5	4.8	371
35-39	68.3	5.1	3.3	30.8	0.8	456	43.9	17.0	9.0	51.7	6.3	445
40-44	71.1	4.2	4.1	26.7	1.6	299	48.6	17.2	15.8	47.6	9.5	219
45-49	75.0	2.5	2.2	23.3	0.7	315	56.5	11.2	7.5	39.2	3.0	259
50-54	NA	NA	NA	NA	NA	NA	55.7	12.0	9.1	41.8	5.2	201
55-59	NA	NA	NA	NA	NA	NA	58.9	5.2	1.8	39.1	0.4	171
Residence												
Urban	47.2	14.2	12.4	45.1	3.1	1,122	29.3	34.3	24.9	60.1	13.0	941
Rural	78.2	1.7	1.1	20.7	0.3	2,907	57.7	6.1	3.9	39.8	0.8	2,601
Mainland/Zanzibar												
Mainland	70.3	5.2	3.8	26.9	1.0	3,929	50.8	13.5	8.8	44.8	4.0	3,452
Urban	47.9	14.2	11.3	44.7	3.0	1,088	29.7	34.4	23.9	60.0	12.9	909
Rural	78.9	1.7	0.9	20.1	0.3	2,841	58.4	6.0	3.4	39.4	0.7	2,543
Zanzibar	41.0	6.8	24.4	51.0	3.4	100	25.9	16.5	35.6	61.9	8.1	90
Pemba	52.6	4.1	12.7	43.2	2.0	44	29.3	11.6	21.2	64.3	4.5	36
Unguja	32.0	8.9	33.5	57.0	4.4	56	23.8	19.7	45.1	60.3	10.4	55
Education												
No education	84.7	0.0	0.8	14.8	0.0	1,093	72.3	2.1	3.7	26.9	0.9	495
Primary incomplete	74.1	2.7	1.9	22.7	0.1	854	57.1	6.4	8.1	39.3	2.2	1,000
Primary complete	63.6	6.9	4.5	33.3	1.2	1,866	46.0	16.0	9.1	48.2	3.8	1,791
Secondary+	27.1	26.9	29.3	60.7	9.0	215	9.7	46.8	29.4	83.1	18.9	256
Total	69.6	5.2	4.3	27.5	1.1	4,029	50.2	13.6	9.5	45.2	4.1	3,542

NA = Not applicable

2.10 ACCESS TO MEDIA

Female and male respondents were asked in the survey if they usually read a newspaper, listen to the radio, or watch television at least once a week. This information is of use in planning the dissemination of family planning and health messages. Table 2.16 shows the percentage of female and male respondents exposed to different types of mass media by age, residence, and level of education.

Results show that 5 percent of women and 14 percent of men read a newspaper or magazine weekly, while 28 percent of women and 45 percent of men listen to the radio at least once a week. Only 4 percent of women and 10 percent of men watch television at least once a week. The vast majority of respondents do not use any of these media (70 percent of women and 50 percent of men).

Access to mass media is somewhat higher among younger respondents and among those living in urban rather than rural areas. It is also higher among residents of Zanzibar than among residents of the Mainland. As expected, educated persons are more likely to read newspapers or magazines, watch television, and listen to the radio than less-educated persons. Overall, data indicate that of the three media, radio is by far the most widespread compared with the other two.

It is interesting to note that access to mass media appears to have fallen considerably over recent years. For example, the proportion of women who read newspapers weekly increased from 25 percent in 1991-92 to 31 percent in 1994, then declined to 13 percent in 1996 and further to 5 percent in 1999. A similar pattern exists for television viewing and radio listening habits. While some of the trend may be real, most is probably due to changes in the wording of the questions in the 1996 survey and again in the 1999 survey. For example, while the two earlier surveys asked if the respondent usually reads a newspaper at least once a week, the 1996 TDHS asked an open-ended question ("How often do you read a newspaper?") with a set of six possible codes from which the interviewer was to choose the closest to the respondent's answer. In the 1999 TRCHS, the question was: "Do you read a newspaper or magazine almost every day, at least once a week, less than once a week or not at all?" While the simpler yes-no question that was used in the first two surveys might have lead the respondent to answer affirmatively, it is not apparent why the wordings of the questions used in the 1996 and 1999 surveys would have lead to an apparent decline in coverage.

2.11 EMPLOYMENT AND OCCUPATION

In the 1999 TRCHS, information was collected about current employment, earnings, and occupation for women age 15-49 and men age 15-59. Although data were collected from female and male respondents, the analysis in this section concentrates on women. Women were asked several questions designed to elicit whether or not they were working. First, they were asked if they were doing any work other than their own housework. If the answer was negative, they were asked a more probing question, suggesting that some women may sell things, have a small business or work on the family farm or business.

Data in Table 2.17 indicate that 24 percent of women report being unemployed. The proportion not working is higher among younger women and those residing in urban areas. The proportion of women not working is also higher in Zanzibar and surprisingly, among the better educated. Most women who work do so on a seasonal basis; just under one-half of all women work part of the year, while one-quarter work throughout the year.

The proportion of women who are not currently working seems to have declined over time, from 46 percent in 1996 to 24 percent in 1999; however, the questions asked differed in the two surveys. Therefore, much of the decline is probably spurious.

Women who reported themselves as employed at the time of the survey were asked whether they worked for a member of their family, worked for someone else, or were self-employed. They were also asked if they earned cash for their work (Table 2.18). Thirty-seven percent of working women are self-employed, while 9 percent work for others and 54 percent work in a family business. Most working women (73 percent) earn cash for their work. Rural working women are more likely to work in a family business, while urban women are more likely to work for others or for themselves. Urban women who work are also more likely than rural women to receive cash earnings (88 vs. 68 percent). Women in Zanzibar who work are more likely to be self-employed or to work for an employer and less likely to work in family businesses than women in the Mainland.

Table 2.17 Employment

Percentage of women in various employment categories, according to selected background characteristics, Tanzania 1999

Background characteristic	Not currently employed		Currently employed			Missing	Total	Number of women
	No work for last 12 months	Worked last 12 months	All year	Season-ally	Occa-sionally			
Age								
15-19	38.6	5.1	15.6	37.4	3.3	0.0	100.0	909
20-24	18.1	6.6	24.0	46.0	5.2	0.2	100.0	811
25-29	16.6	5.2	26.3	46.1	5.7	0.1	100.0	749
30-34	11.7	5.0	27.5	54.1	1.7	0.0	100.0	490
35-39	11.7	3.1	29.9	52.9	1.5	0.9	100.0	456
40-44	6.9	2.0	34.2	55.5	1.5	0.0	100.0	299
45-49	11.1	4.0	26.0	55.2	3.3	0.3	100.0	315
Residence								
Urban	26.9	6.9	34.6	26.4	5.2	0.0	100.0	1,122
Rural	16.8	4.0	20.7	55.3	3.0	0.3	100.0	2,907
Mainland/Zanzibar								
Mainland	19.3	4.8	24.6	47.6	3.5	0.2	100.0	3,929
Urban	26.7	6.9	34.5	26.5	5.3	0.0	100.0	1,088
Rural	16.5	4.0	20.7	55.7	2.9	0.2	100.0	2,841
Zanzibar	30.4	7.3	23.1	32.7	6.0	0.4	100.0	100
Pemba	29.9	6.8	9.6	46.4	7.2	0.2	100.0	44
Unguja	30.9	7.7	33.7	22.0	5.1	0.6	100.0	56
Education								
No education	16.3	3.7	19.3	58.2	2.2	0.3	100.0	1,093
Primary incomplete	28.7	4.7	22.1	39.6	4.9	0.0	100.0	854
Primary complete	15.7	5.6	26.8	47.8	3.8	0.2	100.0	1,866
Secondary+	33.5	5.0	41.1	16.7	3.7	0.0	100.0	215
Total	19.6	4.8	24.5	47.2	3.6	0.2	100.0	4,029

Table 2.19.1 indicates the type of occupation in which working women are engaged. Seventy-two percent of employed women are involved in agricultural activities, mostly working on their own or family-owned land. Twenty percent of working women are involved in unskilled manual jobs. Only 2 percent of women are doing professional, managerial, or technical jobs.

Table 2.19.2 presents similar data for men. It shows that only 11 percent of men are not currently employed. Sixty-two percent of all men 15-59 work in agriculture, mostly on their own or family land. Four percent have professional, technical, or managerial jobs, while 21 percent work as manual laborers.

Among both women and men, agricultural jobs are more common in rural than in urban areas. Educated women and men are more likely to be employed in professional and technical occupations.

Table 2.18 Employer and form of earnings

Percent distribution of employed women by employer and form of earnings, according to background characteristics, Tanzania 1999

Background characteristic	Self-employed		Employed by a nonrelative		Employed by a relative		Missing	Total	Number of women
	Earns cash	Does not earn cash	Earns cash	Does not earn cash	Earns cash	Does not earn cash			
Age									
15-19	20.8	2.0	9.2	0.2	33.5	34.1	0.2	100.0	511
20-24	36.3	4.3	10.1	0.2	30.1	18.8	0.2	100.0	611
25-29	36.8	6.8	7.5	0.0	32.5	16.3	0.0	100.0	586
30-34	32.5	6.2	4.8	0.0	33.3	23.2	0.0	100.0	408
35-39	28.3	7.5	10.3	0.0	34.9	18.3	0.7	100.0	388
40-44	30.2	4.4	10.9	0.0	32.3	22.1	0.0	100.0	273
45-49	35.3	7.6	4.7	0.0	33.3	19.1	0.0	100.0	266
Residence									
Urban	47.2	3.0	28.0	0.0	12.8	9.0	0.0	100.0	743
Rural	26.6	6.1	2.0	0.1	39.1	25.8	0.2	100.0	2,300
Mainland/Zanzibar									
Mainland	31.3	5.0	8.3	0.1	33.2	22.0	0.2	100.0	2,981
Urban	46.7	2.9	28.1	0.0	13.1	9.2	0.0	100.0	722
Rural	26.4	5.7	1.9	0.1	39.7	26.1	0.2	100.0	2,260
Zanzibar	49.7	22.4	13.9	0.3	5.0	8.7	0.0	100.0	62
Pemba	35.4	33.7	10.2	0.0	5.9	14.7	0.0	100.0	28
Unguja	61.2	13.3	16.9	0.5	4.3	3.8	0.0	100.0	34
Education									
No education	23.8	7.2	3.2	0.1	38.6	26.9	0.2	100.0	874
Primary incomplete	32.8	5.1	5.9	0.0	33.8	22.4	0.0	100.0	569
Primary complete	35.3	4.6	9.6	0.1	30.1	20.0	0.2	100.0	1,468
Secondary+	37.7	2.7	39.4	0.1	16.3	3.8	0.0	100.0	132
Total	31.6	5.3	8.4	0.1	32.7	21.7	0.2	100.0	3,043

Table 2.19.1 Occupation: women

Percent distribution of employed women by current occupation and type of agricultural land worked or type of nonagricultural employment, according to selected background characteristics, Tanzania 1999

Background characteristic	Agricultural				Nonagricultural					Total	Number of women
	Own land	Family land	Rented land	Other's land	Professional/ technical	Sales/ service	Skilled manual	Unskilled manual	Other		
Age											
15-19	12.2	64.1	0.1	0.7	0.2	2.2	1.4	17.1	2.0	100.0	511
20-24	23.3	39.9	1.5	1.2	1.2	4.1	1.0	22.8	5.1	100.0	611
25-29	25.8	39.4	0.0	0.3	2.9	1.7	1.1	26.4	2.4	100.0	586
30-34	28.7	41.8	0.2	0.7	2.5	1.4	1.9	19.9	2.8	100.0	408
35-39	27.8	38.7	0.8	1.6	2.7	3.5	1.1	22.2	1.6	100.0	388
40-44	33.4	42.2	0.3	1.2	6.9	0.3	0.6	15.1	0.1	100.0	273
45-49	39.8	41.4	2.6	0.5	2.5	0.8	0.4	10.4	1.6	100.0	266
Residence											
Urban	9.6	14.2	1.0	0.5	7.0	6.6	2.4	50.6	8.1	100.0	743
Rural	30.7	54.0	0.6	1.0	0.8	0.8	0.7	10.5	0.8	100.0	2,300
Mainland/Zanzibar											
Mainland	25.5	45.1	0.7	0.7	2.2	2.3	0.9	20.0	2.6	100.0	2,981
Urban	9.8	14.6	1.1	0.4	6.7	6.7	2.1	50.4	8.3	100.0	722
Rural	30.6	54.8	0.6	0.8	0.8	0.8	0.5	10.3	0.8	100.0	2,260
Zanzibar	28.2	6.7	0.3	7.2	7.4	1.8	14.0	32.6	1.8	100.0	62
Pemba	42.2	10.2	0.6	12.4	4.9	0.3	10.3	18.7	0.3	100.0	28
Unguja	16.9	3.9	0.0	3.0	9.3	3.0	17.0	43.7	3.1	100.0	34
Education											
No education	29.4	56.1	0.4	1.3	0.5	0.5	0.4	10.8	0.6	100.0	874
Primary incomplete	24.6	49.5	1.6	0.8	0.4	0.6	0.7	17.2	4.5	100.0	569
Primary complete	25.6	38.2	0.6	0.6	2.0	3.2	1.2	25.6	3.0	100.0	1,468
Secondary+	4.5	11.3	0.1	1.1	27.0	10.3	6.9	37.2	1.7	100.0	132
Total	25.6	44.3	0.7	0.9	2.3	2.2	1.1	20.3	2.6	100.0	3,043

Table 2.19.2 Occupation: men

Percent distribution of men by current occupation and type of nonagricultural employment, according to selected background characteristics, Tanzania 1999

Background characteristic	Not currently employed	Agricultural				Nonagricultural						Number of men
		Own land	Family land	Rented land	Other's land	Professional/ technical	Sales/ service	Skilled manual	Unskilled manual	Other	Total	
Age												
15-19	31.7	12.5	31.3	0.5	3.8	0.9	2.7	2.2	13.8	0.6	100.0	790
20-24	9.3	23.4	28.1	2.5	5.1	1.0	3.5	7.6	18.9	0.5	100.0	540
25-29	3.5	29.1	26.7	3.0	4.9	2.5	3.1	9.1	17.9	0.1	100.0	546
30-34	3.0	32.3	22.7	6.6	4.1	4.5	2.9	8.3	14.8	0.9	100.0	371
35-39	2.1	23.1	32.0	3.2	4.4	8.0	1.9	7.8	17.3	0.3	100.0	445
40-44	5.2	33.0	25.7	2.4	6.4	10.4	1.0	5.5	9.9	0.4	100.0	219
45-49	3.8	45.1	24.4	1.0	3.8	6.6	0.7	7.2	7.2	0.0	100.0	259
50-54	2.8	29.5	33.8	0.8	4.4	10.6	0.2	6.3	11.4	0.1	100.0	201
55-59	6.1	51.0	26.4	2.8	2.3	0.3	5.1	1.7	4.2	0.1	100.0	171
Residence												
Urban	13.9	7.9	8.7	2.5	2.9	9.3	6.5	15.3	31.8	1.1	100.0	941
Rural	9.5	33.4	35.5	2.5	4.9	2.0	1.1	2.9	8.1	0.1	100.0	2,601
Mainland/Zanzibar												
Mainland	10.6	26.8	29.0	2.5	4.1	3.8	2.5	6.1	14.2	0.4	100.0	3,452
Urban	14.0	8.1	9.0	2.6	2.9	8.9	6.5	15.3	31.7	1.1	100.0	909
Rural	9.4	33.6	36.1	2.5	4.6	2.0	1.0	2.8	7.9	0.1	100.0	2,543
Zanzibar	12.3	17.2	4.8	0.7	14.2	10.3	5.3	9.0	24.7	1.5	100.0	90
Pemba	13.7	24.0	6.0	1.3	15.6	9.4	3.7	7.8	17.3	1.3	100.0	36
Unguja	11.4	12.7	4.0	0.4	13.3	11.0	6.3	9.8	29.5	1.7	100.0	55
Education												
No education	6.1	34.3	38.1	2.5	5.7	0.5	1.6	1.9	9.3	0.1	100.0	495
Primary incomplete	17.9	27.5	28.7	2.2	4.0	0.6	2.1	4.4	12.0	0.7	100.0	1,000
Primary complete	6.6	27.1	28.2	2.6	4.3	3.7	2.8	7.6	16.6	0.3	100.0	1,791
Secondary+	19.7	4.2	8.9	2.5	3.8	25.9	3.9	12.1	18.4	0.6	100.0	256
Total	10.7	26.6	28.3	2.5	4.4	4.0	2.5	6.2	14.4	0.4	100.0	3,542

FERTILITY 3

The fertility measures presented in this chapter are based on the reported birth histories of women age 15-49 who were interviewed in the 1999 Tanzania Reproductive and Child Health Survey (TRCHS). Estimates of fertility are based on carefully gathered survey data. Each woman was first asked about the number of sons and daughters who were living with her, were living elsewhere, or had died. Each woman was also asked for a history of her births, including the month and year each child was born; the name and sex; if deceased, the age at death; and if alive, the current age and whether the child was living with the mother. The information obtained from those questions was used to calculate measures of current and completed fertility, i.e., the number of children ever born.

3.1 CURRENT FERTILITY

Table 3.1 presents age-specific fertility rates and other summary indicators calculated from survey data such as the total fertility rate, the general fertility rate, and the crude birth rate. The age-specific fertility rate is defined as the number of live births during a specified period to women in a particular age group divided by the number of woman-years lived in that age group during the specified period. It is a valuable measure of the current childbearing performance of women. The total fertility rate (TFR) is the number of children a woman would have from age 15 to age 49 if she were to bear children at the prevailing age-specific rates (or the average number of children a woman would have if she experienced a given set of age-specific fertility rates through her lifetime). It is obtained by summing the age-specific fertility rates and multiplying by five. It is a useful summary measure of age-specific fertility rates. The general fertility rate is the number of live births occurring during a specified period per 1,000 women of reproductive age (in this case,15-49). Finally, the crude birth rate is the number of births per 1,000 population.

Table 3.1 Current fertility

Age-specific and cumulative fertility rates and the crude birth rate for the five years preceding the survey, by urban-rural residence, Tanzania 1999

	Residence		
Age group	Urban	Rural	Total
15-19	95	154	138
20-24	199	301	268
25-29	170	269	240
30-34	93	262	213
35-39	58	165	138
40-44	17	96	78
45-49	0	49	37
TFR women 15-49	3.16	6.48	5.55
TFR women 15-44	3.16	6.24	5.37
General fertility rate	128	223	195
Crude birth rate	34.4	43.5	41.4

Note: Rates are for the period 1-59 months preceding the survey. Rates for age group 45-49 may be slightly biased due to truncation. Total fertility rate expressed per woman. General fertility rate (births divided by number of women 15-49), expressed per 1,000 women. Crude birth rate expressed per 1,000 population.

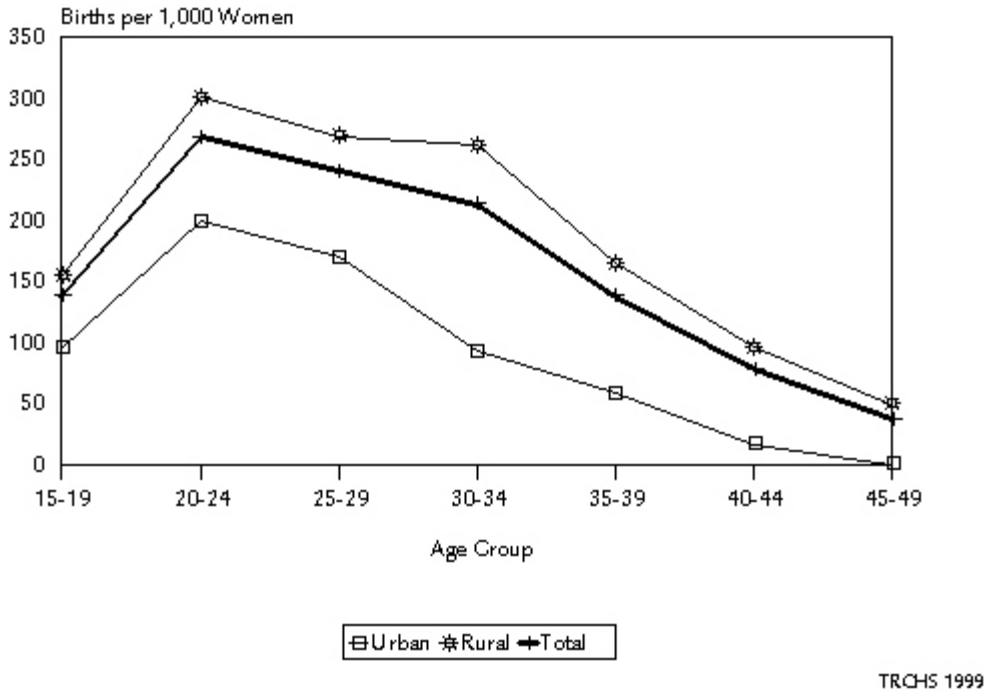
Measures of current fertility are estimated for the three-year period preceding the survey, which corresponds roughly to 1997-1999. The choice of the reference period is a compromise between providing the most recent information, avoiding problems of omission or displacement of births due to recall lapse for older women, and obtaining enough cases to reduce the sampling errors.

The TFR in Tanzania is 5.6 births per woman. The TFR in rural areas is 6.5, compared with 3.2 in urban areas. In other words, rural women will have on average three more children than their urban counterparts.

The crude birth rate in Tanzania is 41 births per 1,000 population. As with the TFR, there is a clear differential in this rate by residence: 44 in rural areas and 34 in urban areas. The general fertility rate in Tanzania is 195 per 1,000 women, with the rate being much higher in rural areas (223) than in urban areas (128).

The age-specific fertility rates calculated on the basis of the three years preceding the survey indicate that Tanzanian women have a broad-peaked fertility pattern (age-specific fertility rates in age groups 20-24 and 25-29 differ only slightly), as shown in Figure 3.1. However, fertility declines sharply after the mid-30s, with the age-specific fertility rates being only 37 births per 1,000 women at age group 45-49.

Figure 3.1 **Age-Specific Fertility Rates by Urban-Rural Residence**



3.2 FERTILITY DIFFERENTIALS

Table 3.2 and Figure 3.2 present fertility differentials according to urban-rural residence, for Mainland/Zanzibar, and by level of education. The large urban-rural differentials in fertility measures have already been noted. Looking at differences between the Mainland and Zanzibar, the results show almost identical total fertility rates of 5.6 each. However, the data indicate large differences in fertility rates by level of education. Women who completed primary school have a total fertility rate of 4.9 children per woman, which is lower than the rates for women with incomplete primary education (5.1) and women with no education (6.5).

Table 3.2 also shows the mean number of live births for women age 40-49. This figure is an indicator of completed fertility or cumulative fertility for women who are approaching the end of their childbearing years. A comparison of the total fertility rate (5.6) and the cumulative fertility rate (6.7) gives an indication of fertility trends over time. For all women, the mean number of live births has been decreasing in Tanzania, and this pattern is true for all groups.

Nine percent of interviewed women reported that they were pregnant at the time of interview. Variations in this proportion are minimal except that urban women are far less likely than rural women to be pregnant.

Table 3.2 Fertility by background characteristics

Total fertility rate for the three years preceding the survey, percentage currently pregnant, and mean number of children ever born to women age 40-49, by selected background characteristics, Tanzania 1999

Background characteristic	Total fertility rate[1]	Percentage currently pregnant	Mean number of children ever born to women age 40-49
Residence			
Urban	3.16	5.8	5.33
Rural	6.48	10.8	7.11
Mainland/Zanzibar			
Mainland	5.55	9.4	6.67
Urban	3.12	5.7	5.30
Rural	6.48	10.8	7.10
Zanzibar	5.59	9.4	7.32
Education			
No education	6.53	8.4	7.04
Incomplete primary	5.13	9.1	6.91
Complete primary+	4.85	10.0	5.29
Total	5.55	9.4	6.69

[1] Women age 15-49 years

3.3 FERTILITY TRENDS

Fertility trends can be analysed in two ways. One is to compare the 1999 TRCHS data with previous data, namely the 1988 population census and the 1991-92 and 1996 TDHS surveys.

Figure 3.2 **Total Fertility Rates by Background Characteristics**

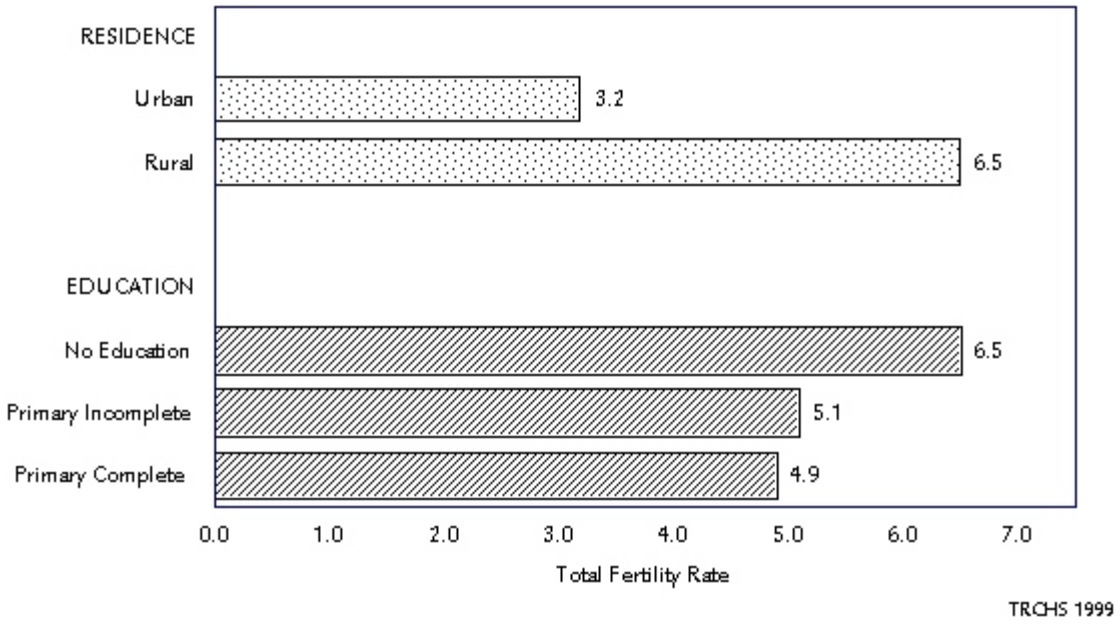


Table 3.3 reveals that fertility has declined gradually but steadily over time, from 6.5 children per woman in the 1988 census to 5.6 children per woman in the 1999 TRCHS. For women in the two youngest age groups, the trend is erratic: first rising, then falling, then rising slightly again. However, for women age 25-44, the trend in age-specific rates is generally a steady decline. Rates for the oldest age group are again erratic, which could be due to the small sample size, which is subject to high sampling errors.

Table 3.3 Trends in fertility

Age-specific fertility rates (per 1,000 women) and total fertility rates for 1988 Census and selected surveys, Tanzania 1988-1999

Age group	Census 1988	TDHS 1991-92	TDHS 1996	TRCHS 1999
15-19	106	144	135	138
20-24	280	282	260	268
25-29	310	270	255	240
30-34	272	231	217	213
35-39	206	177	167	138
40-44	105	108	87	78
45-49	17	37	42	37
TFR women age 15-49	6.5	6.3	5.8	5.6

Note: Rates refer to the three-year period preceding the survey. Rates for the age group 45-49 may be slightly biased due to truncation.
Source: Bureau of Statistics and Macro International, 1997:31

A second way of analysing fertility trends is using TRCHS data alone. Because women age 50 and above were not interviewed in the survey, the rates are successively truncated as the number of years before the survey increases (see Table 3.4). The data also indicate a gradual decline in fertility in Tanzania during the past 20 years.

Table 3.4 Age-specific fertility rates

Age-specific fertility rates for 5-year periods preceding the survey, Tanzania 1999

Age group	Number of years preceding the survey 0-4	5-9	10-14	15-19
15-19	137	139	159	167
20-24	271	280	272	310
25-29	233	270	250	278
30-34	210	231	272	[234]
35-39	148	191	[168]	-
40-44	89	[134]	-	-
45-49	[32]	-	-	-

Note: Age-specific fertility rates per 1,000 women. Estimates enclosed in brackets are truncated.

3.4 CHILDREN EVER BORN

Table 3.5 shows the distribution of all women and currently married women by age and number of children ever born. The table also shows the mean number of children ever born to women in each age group, an indicator of the momentum of childbearing. Data on the number of children ever born reflect the accumulation of births over the past 30 years and therefore have limited relevance to current fertility levels, especially if the country has experienced a decline in fertility.

The data indicate that one-fifth (20 percent) of all women age 15-19 years have given birth. On average, women have given birth to almost three children by their late 20s, five children by their late 30s, and seven children by the end of their childbearing years. As expected, currently married women have had more births than all women in all age groups. The reason is undoubtedly that currently married women are more consistently exposed to the risk of pregnancy.

The percentage of women in their 40s who have never had children provides an indicator of the level of *primary infertility*—the proportion of women who are unable to bear children at all. Since voluntary childlessness is rare in Tanzania, it is likely that married women with no births are unable to bear children. The TRCHS results suggest that primary infertility is low, less than 2 percent. It should be noted that this estimate of primary infertility does not include women who may have had one or more births but who are unable to have more (*secondary infertility*).

Table 3.5 Children ever born and living

Percent distribution of all women and of currently married women by number of children ever born and mean number of children ever born (CEB) and mean number of living children, according to five-year age groups, Tanzania 1999

Age group	Number of children ever born											Total	Number of women	Mean number of CEB	Mean number of living children
	0	1	2	3	4	5	6	7	8	9	10+				
ALL WOMEN															
15-19	80.3	17.2	2.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	909	0.23	0.19
20-24	21.6	35.9	27.1	12.4	2.3	0.7	0.0	0.0	0.0	0.0	0.0	100.0	811	1.40	1.18
25-29	8.0	15.1	20.9	25.7	18.2	8.2	2.9	0.9	0.0	0.0	0.0	100.0	749	2.72	2.30
30-34	5.6	6.6	8.2	13.9	20.5	19.7	15.1	5.9	2.7	1.7	0.0	100.0	490	4.15	3.52
35-39	3.3	5.2	9.8	10.5	18.7	10.5	11.8	11.4	10.9	3.6	4.3	100.0	456	4.98	4.04
40-44	1.9	4.8	4.8	4.6	8.0	14.1	12.0	11.9	14.1	9.8	13.9	100.0	299	6.40	5.15
45-49	0.6	5.7	2.8	5.9	5.8	9.5	13.7	8.6	14.2	15.2	18.0	100.0	315	6.96	5.57
Total	25.2	16.1	12.5	11.0	9.5	7.0	5.7	3.7	3.7	2.5	2.9	100.0	4,029	2.93	2.41
CURRENTLY MARRIED WOMEN															
15-19	46.4	44.5	7.3	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	227	0.64	0.53
20-24	10.1	35.6	35.7	14.2	3.5	1.0	0.0	0.0	0.0	0.0	0.0	100.0	550	1.68	1.45
25-29	5.7	11.6	20.9	28.3	19.9	9.3	3.3	1.1	0.0	0.0	0.0	100.0	615	2.92	2.48
30-34	3.8	5.6	7.5	10.6	21.5	21.2	17.3	7.2	3.2	2.0	0.0	100.0	407	4.43	3.80
35-39	2.5	4.2	7.9	10.5	19.6	8.8	12.6	11.5	12.6	4.5	5.4	100.0	364	5.26	4.24
40-44	2.0	2.1	2.2	5.0	6.7	15.8	12.6	12.4	14.0	11.9	15.4	100.0	239	6.78	5.43
45-49	0.0	6.0	3.5	3.5	6.4	9.9	11.8	8.9	16.1	14.8	19.1	100.0	251	7.10	5.72
Total	8.5	16.1	15.6	13.5	12.5	9.2	7.4	4.9	5.0	3.4	3.9	100.0	2,653	3.77	3.11

3.5 BIRTHS INTERVALS

A birth interval is defined as the length of time between two successive live births. Research has shown that short birth intervals adversely affect the health of mothers and their children's chances of survival. Table 3.6 shows the percent distribution of non-first births that occurred in the five years before the TRCHS by the number of months since the previous birth.

The data show that most Tanzanian children are born after a “safe” interval of two or more years (83 percent). Fewer than one in five births (17 percent) occurs after an interval of less than 24 months. The median birth interval is 33 months. Birth interval length has not changed since 1991-92 nor since 1996.

As expected, younger women have shorter birth intervals than older women, presumably because younger women are more fecund and want to build their families. The median birth interval for women age 15-19 is 25 months, compared with 37 months for women over age 40. A shorter median interval also prevails for children whose preceding sibling has died, compared with those whose preceding sibling is living. The overall median birth interval is about 7 months shorter for children whose preceding sibling died compared with children whose preceding sibling survived. This pattern presumably reflects a shortened breastfeeding period due to the death of the preceding sibling, as well as minimal use of contraceptives.

Table 3.6 Birth intervals

Percent distribution of non-first births in the five years preceding the survey by number of months since previous birth and median length of birth interval, according to selected demographic and socioeconomic characteristics, Tanzania 1999

Characteristic	Number of months since previous birth					Total	Number of births	Median number of months since previous birth
	7-17	18-23	24-35	36-47	48+			
Age of mother								
15-19	(40.8)	(6.9)	(43.6)	(1.4)	(7.3)	100.0	26	24.5
20-29	7.1	13.4	45.3	19.8	14.5	100.0	1,287	31.2
30-39	2.8	8.8	36.3	25.1	27.1	100.0	931	36.4
40 +	1.7	11.4	34.8	22.3	29.8	100.0	267	37.3
Birth order								
2-3	8.0	12.4	38.5	22.0	19.1	100.0	1,099	32.6
4-6	3.2	10.7	43.2	19.7	23.2	100.0	933	33.3
7 +	3.1	10.5	41.3	25.4	19.6	100.0	480	34.4
Sex of prior birth								
Male	5.7	11.4	39.7	22.2	21.1	100.0	1,314	33.6
Female	4.8	11.5	42.0	21.4	20.2	100.0	1,198	33.0
Survival of prior birth								
Dead	19.0	17.7	31.8	13.6	18.0	100.0	404	27.3
Living	2.7	10.2	42.5	23.4	21.2	100.0	2,108	34.1
Residence								
Urban	4.3	6.3	23.9	22.6	42.9	100.0	387	43.2
Rural	5.5	12.3	43.9	21.7	16.7	100.0	2,125	32.2
Mainland/Zanzibar								
Mainland	5.2	11.3	40.9	21.8	20.8	100.0	2,439	33.4
Urban	4.2	5.8	23.3	22.8	43.9	100.0	369	43.7
Rural	5.4	12.3	44.0	21.7	16.7	100.0	2,070	32.2
Zanzibar	8.6	15.1	38.5	21.1	16.7	100.0	73	31.6
Pemba	11.0	17.1	39.5	20.3	12.1	100.0	37	30.1
Unguja	6.1	13.1	37.4	21.9	21.5	100.0	36	33.6
Education								
No education	4.7	11.6	40.5	22.8	20.4	100.0	759	33.7
Incomplete primary	5.7	12.0	39.2	23.5	19.5	100.0	420	33.3
Complete primary	5.5	11.0	41.9	20.6	20.9	100.0	1,263	33.0
Secondary+	4.8	13.1	33.2	22.2	26.8	100.0	70	35.1
Total	5.3	11.4	40.8	21.8	20.7	100.0	2,512	33.3

Note: The interval for multiple births is the number of months since the end of the preceding pregnancy that ended in a live birth. Numbers in parentheses are based on 25 to 49 respondents (unweighted).

The median birth interval is 11 months longer in urban than in rural areas. Eleven percent of births in urban areas occur at intervals of less than 24 months, compared with 18 percent of rural births. By region, the results show that about 17 percent of births in the Mainland versus 24 percent of births in Zanzibar occur after intervals of less than 24 months. Birth intervals vary little by mother's education.

3.6 AGE AT FIRST BIRTH

The age at which childbearing begins influences the number of children a woman bears throughout her reproductive period in the absence of any active control. Table 3.7 shows the percent distribution of women by age at first birth, according to age at the time of the survey. For women age 20 and older, the median age at first birth is presented in the last column of the table.

Table 3.7 Age at first birth

Percent distribution of women 15-49 by age at first birth and median age at first birth, according to current age, Tanzania 1999

Current age	Women with no births	Age at first birth						Total	Number of women	Median age at first birth
		<15	15-17	18-19	20-21	22-24	25+			
15-19	80.3	1.2	11.7	6.8	NA	NA	NA	100.0	909	a
20-24	21.6	3.1	23.3	29.8	17.9	4.3	NA	100.0	811	19.6
25-29	8.0	3.3	26.6	26.3	21.9	11.1	2.8	100.0	749	19.5
30-34	5.6	5.7	29.2	27.6	15.8	9.0	7.1	100.0	490	19.1
35-39	3.3	7.2	28.1	24.0	16.1	13.2	8.0	100.0	456	18.9
40-44	1.9	7.4	43.7	21.6	11.2	7.5	6.7	100.0	299	17.9
45-49	0.6	6.3	36.6	18.7	16.9	12.0	9.0	100.0	315	18.9

NA = Not applicable
[a] Omitted because less than 50 percent of women in the age group had a birth before entering the age group.

The results confirm findings from the 1991-92 and 1996 TDHS which show that childbearing begins early in Tanzania, with most women becoming mothers before they reach the age of 20. The median age at first birth is between 18 and 20. The data show that the median age at first birth has increased slightly from around 18 or 19 for older women to over 19 for women in their early 20s. This slight change to later age at first birth is reflected in the smaller proportion of younger women whose first births occurred before age 15; about 6-7 percent of women in their 30s and 40s report having had their first birth before age 15, compared with only 1 percent of women age 15-19.

Table 3.8 shows the median age at first birth among women aged 20-49 years by current age and selected background characteristics. There is not much variation in age at first birth by place of residence, with urban women having only slightly higher ages at first birth than rural women. The median age at first birth shows an inverse relationship with educational attainment: as low as 18 years for women with no education or incomplete primary education and increasing to 23 years for women with at least some secondary education.

3.7 TEENAGE PREGNANCY AND MOTHERHOOD

Early childbearing, particularly among teenagers (those under 20 years of age) has negative demographic, socioeconomic, and sociocultural consequences. Teenage mothers are more likely to suffer from severe complications during delivery, which result in higher morbidity and mortality for both themselves and their children. In addition, the socioeconomic advancement of teenage mothers in the areas of educational attainment and accessibility to job opportunities may be curtailed.

Table 3.8 Median age at first birth by background characteristics

Median age at first birth among women 20-49, by current age and selected background characteristics, Tanzania 1999

Background characteristic	Current age						Women age 20-49	Women age 25-49
	20-24	25-29	30-34	35-39	40-44	45-49		
Residence								
Urban	20.5	19.8	19.9	20.1	17.7	18.8	19.8	19.5
Rural	19.3	19.3	18.9	18.7	18.1	18.9	19.0	18.9
Mainland/Zanzibar								
Mainland	19.6	19.5	19.1	18.9	17.9	18.9	19.2	19.0
Urban	a	19.8	19.9	20.2	17.7	18.8	19.8	19.5
Rural	19.3	19.3	18.9	18.7	18.1	19.0	19.0	18.9
Zanzibar	a	19.6	19.7	18.3	17.0	15.7	19.0	18.7
Education								
No education	18.6	19.2	17.7	18.0	17.5	19.1	18.2	18.1
Incomplete primary	18.7	18.9	17.4	19.5	18.4	18.1	18.5	18.4
Complete primary	19.8	19.3	19.5	20.2	18.0	19.2	19.6	19.5
Secondary+	a	23.5	23.5	23.0	20.4	23.2	a	23.4
Total	19.6	19.5	19.1	18.9	17.9	18.9	19.2	19.0

[a] Omitted because less than 50 percent of women in the age group had a birth before entering the age group.

Table 3.9 shows the percentage of women age 15-19 years who are mothers or pregnant with their first child by background characteristics. One in five teenage women in Tanzania is a mother and another 5 percent are pregnant with their first child. Thus, 25 percent of teenage women have begun childbearing. There has been a slight decline in this proportion since the 1996 TDHS, which indicated that 26 percent of women age 15-19 had begun childbearing (21 percent had delivered a child and 5 percent were pregnant with their first child) (Bureau of Statistics and Macro International Inc., 1997:38).

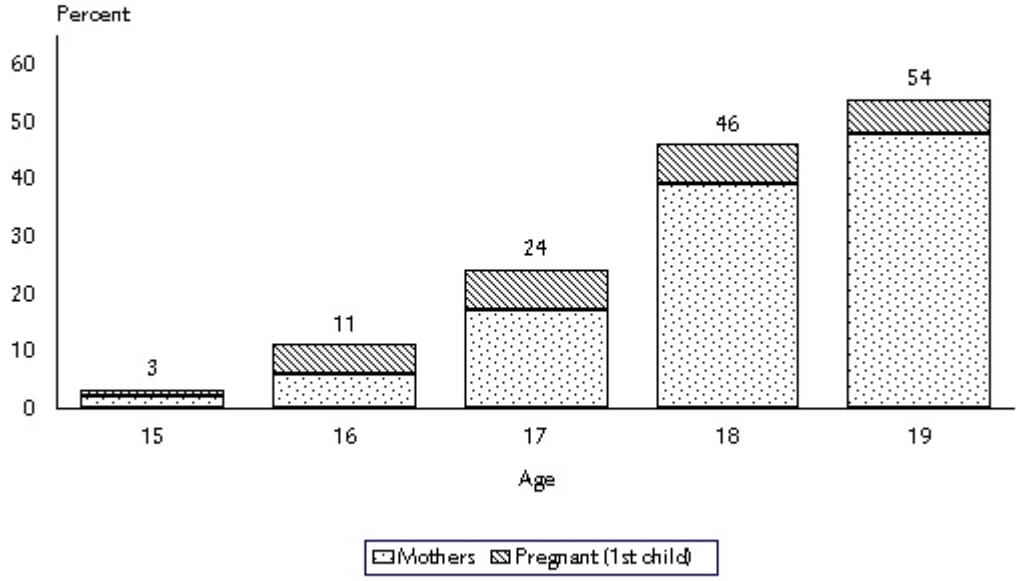
As expected, the proportion of women who have begun childbearing rises rapidly with age, from 3 percent of those age 15 to 54 percent of those age 19 (see Figure 3.3). Those residing in the Mainland and especially those with no education are also more likely than others to have begun childbearing.

Table 3.9 Teenage pregnancy and motherhood

Percentage of women 15-19 who are mothers or pregnant with their first child, by selected background characteristics, Tanzania 1999

Background characteristic	Percentage who are:		Percentage who have begun child-bearing	Number of women
	Mothers	Pregnant with first child		
Age				
15	2.0	0.6	2.6	217
16	5.8	4.7	10.5	210
17	16.9	7.5	24.4	182
18	39.1	6.9	46.0	137
19	47.9	6.0	53.9	163
Residence				
Urban	20.4	2.6	23.1	217
Rural	19.4	5.5	25.0	692
Mainland/Zanzibar				
Mainland	19.9	4.9	24.7	884
Urban	20.7	2.7	23.4	208
Rural	19.6	5.5	25.1	676
Zanzibar	12.8	4.5	17.2	25
Pemba	8.9	6.8	15.7	12
Unguja	16.3	2.3	18.6	13
Education				
No education	23.9	8.8	32.7	189
Incomplete primary	15.9	0.8	16.8	318
Complete primary	22.2	6.5	28.7	356
Secondary+	8.5	3.8	12.3	46
Total	19.7	4.9	24.5	909

Figure 3.3 Pregnancy and Childbearing among Women Age 15-19



TRCHS 1999

FERTILITY REGULATION 4

Knowledge of family planning methods and where they can be obtained is necessary in deciding whether to adopt a contraceptive method and which method to choose. This chapter presents information on contraceptive knowledge, attitudes, behaviour, and sources. In presenting the findings on fertility regulation, the primary focus is on women of reproductive age, with some analogous survey results from men, who play an important role in the realisation of reproductive goals.

4.1 KNOWLEDGE OF FAMILY PLANNING METHODS

As in the 1996 TDHS, information about knowledge of family planning methods among women and men was collected in two ways in the 1999 TRCHS. First, respondents were asked to name methods or ways couples can use to prevent or delay pregnancy. When a respondent failed to mention a method spontaneously, the interviewer described the method and then asked if the respondent knew it. Using this approach, information was collected for nine modern family planning methods: female and male sterilisation, the pill, IUD, injectables, implants, male condom, female condom, and vaginal methods (foam/jelly/diaphragm). Information was also collected on three traditional methods: the calendar (rhythm) method, lactational amenorrhoea, and withdrawal. Provision was also made in the questionnaire to record any other methods named spontaneously by respondents. Both prompted and unprompted knowledge are combined in this report.

Table 4.1 shows the level of knowledge of specific contraceptives among all women and men, currently married women and men, sexually active unmarried women and men, and women with no sexual experience. The level of knowledge of any contraceptive method among all women age 15-49 years is high; almost all women (91 percent) have heard of at least one contraceptive method. Almost all of the women who have heard of any contraceptive method have heard of a modern method (91 percent), while slightly more than a half (58 percent) of the women have heard of a traditional contraceptive method. The results show that contraceptive knowledge is higher among currently married women (95 percent) than sexually active unmarried women (92 percent) and women with no sexual experience (65 percent).

The most commonly recognised contraceptive methods among all women age 15-49 in Tanzania are the pill (86 percent), male condoms (83 percent), injectables (81 percent), female sterilisation (63 percent), the IUD (54 percent), female condoms (41 percent), and implants (40 percent). About a quarter of women (27 percent) know about male sterilisation, and about a fifth (21 percent) know about vaginal contraceptives (diaphragm/foam/jelly). Concerning the traditional methods, a substantial number of women know about withdrawal (39 percent) and periodic abstinence (37 percent), and one-quarter (25 percent) have heard about lactational amenorrhoea. Knowledge of other methods was found to be generally low (18 percent).

Men are slightly more likely than women to have heard of at least one family planning method (93 versus 91 percent). As expected, men are more likely than women to know about male-oriented methods and less likely to know about female methods. For example, 90 percent of men compared with 83 percent of women know about the male condom and 33 percent of men compared with 27 percent of women know about male sterilisation. Men are also more knowledgeable of some traditional contraceptive methods; 47 percent of men compared with

Table 4.1 Knowledge of contraceptive methods

Percentage of all women 15-49 and men 15-59, of currently married women and men, of sexually active unmarried women and men, and of women with no sexual experience who know specific contraceptive methods, Tanzania 1999

Contraceptive method	Women				Men		
	All women	Currently married women	Sexually active unmarried women	No sexual experience	All men	Currently married men	Sexually active unmarried men
Any method	90.9	95.3	91.6	65.4	92.8	97.1	96.1
Any modern method	90.5	94.9	90.7	65.3	92.0	96.0	95.8
Pill	86.3	93.0	86.4	48.0	78.9	89.2	80.3
IUD	53.8	59.5	60.6	17.0	39.7	51.3	30.4
Injectables	80.9	87.7	81.7	41.5	67.7	80.3	65.6
Diaphragm/Foam/Jelly	20.6	22.7	30.2	2.6	14.9	19.1	12.4
Male condom	83.2	87.2	86.6	57.7	90.4	94.4	95.4
Female condom	41.4	45.5	51.6	10.9	44.8	53.3	40.5
Female sterilisation	62.5	69.1	64.3	24.9	63.1	75.7	57.9
Male sterilisation	27.3	29.5	32.9	7.9	32.8	40.0	30.3
Implants	40.3	44.7	46.4	9.4	21.7	28.2	16.5
Any traditional method	58.4	66.2	67.4	14.0	61.7	76.4	51.2
Periodic abstinence	36.6	40.0	47.1	11.0	43.0	53.2	34.1
Withdrawal	39.2	45.6	45.8	4.8	46.9	59.2	41.2
LAM	24.6	28.1	27.1	5.0	20.7	28.4	13.0
Other	18.4	22.4	17.4	1.2	14.4	20.5	7.4
Number of respondents	4,029	2,653	366	496	3,542	2,063	551
Mean number of methods	6.2	6.7	6.8	2.4	5.8	6.9	5.3

LAM = Lactational amenorrhoea method

39 percent of women know about withdrawal and 43 percent of men as compared with 37 percent of women know about periodic abstinence. However, men are much less likely than women to have heard about female-oriented methods, especially the IUD, injectables, implants, and the pill.

On average, all women and men know about six contraceptive methods, whereas married women and men know about seven methods.

Table 4.2 shows the correspondence in contraceptive knowledge between husbands and wives for the 1,820 couples interviewed in the 1999 TRCHS sample. Knowledge of at least one contraceptive method by both spouses was found to be high (95 percent). For couples in which only one partner knows of a method, husbands are more likely to know about methods in which they take part, such as male condoms, male sterilisation, periodic abstinence, and withdrawal, while wives are more likely to know about methods like the pill, IUD, injectables, vaginal methods, and implants. Surprisingly, however, husbands are more likely than their wives to have heard of female sterilisation, the female condom, and lactational amenorrheoa. Some methods were not recognised by either the husband or the wife, the most notable being vaginal methods, male sterilisation, and implants, which were unknown to 65 percent, 48 percent, and 46 percent of the couples, respectively.

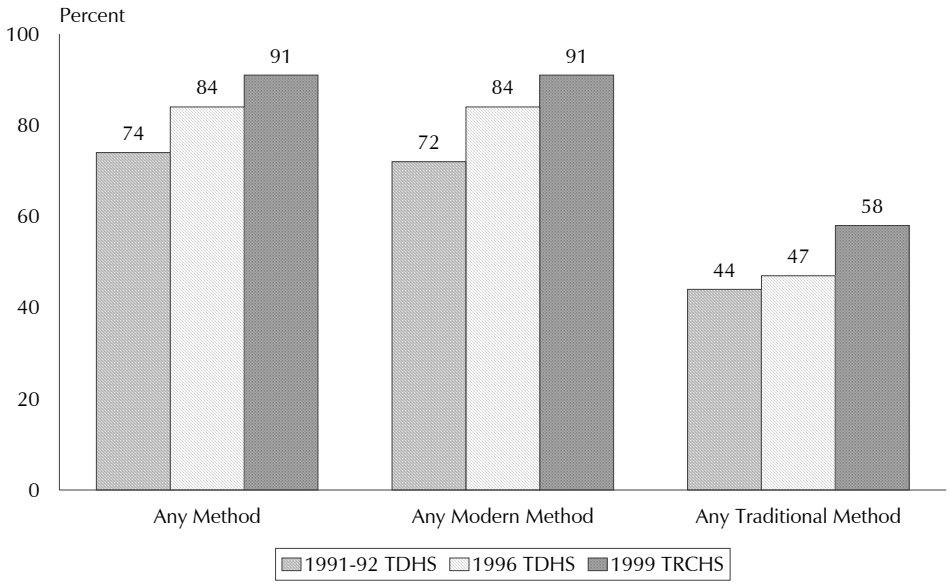
Table 4.2 Couples' knowledge of contraceptive methods

Percent distribution of couples by knowledge of specific contraceptive methods, Tanzania 1999

Contraceptive method	Both know method	Husband knows method, wife doesn't	Wife knows method, husband doesn't	Neither knows method	Total
Any method	94.5	3.0	1.7	0.9	100.0
Any modern method	93.5	2.9	2.3	1.3	100.0
Pill	86.0	3.4	7.8	2.8	100.0
IUD	38.5	13.8	21.3	26.4	100.0
Injectables	73.0	7.3	15.0	4.6	100.0
Diaphragm/Foam/Jelly	6.1	13.1	16.2	64.6	100.0
Male condom	85.8	8.9	2.6	2.7	100.0
Female condom	29.7	24.8	15.0	30.5	100.0
Female sterilisation	57.0	19.5	12.9	10.6	100.0
Male sterilisation	16.6	23.5	12.1	47.8	100.0
Implants	18.7	9.5	25.3	46.4	100.0
Any traditional method	56.3	20.1	10.3	13.4	100.0
Periodic abstinence	26.6	26.9	12.3	34.2	100.0
Withdrawal	35.8	24.0	11.6	28.6	100.0
LAM	11.7	17.2	16.0	55.0	100.0
Other	6.4	13.6	15.5	64.4	100.0

Note: Table is based on 1,820 couples
LAM = Lactational amenorrhoea method

Figure 4.1 Trends in Contraceptive Knowledge Among Women Age 15-49, 1991-1999



4.2 Trends in Contraceptive Knowledge

There has been a substantial increase over time in the proportion of women and men who are aware of contraceptive methods. The proportion of all women who have heard of at least one contraceptive method has increased from 74 percent in 1991-92 to 84 percent in 1996 to 91 percent in 1999 (see Figure 4.1). Knowledge of specific contraceptive methods has increased more dramatically. In 1991-92, only 40 percent of women had heard of the injectable contraceptive; by 1999, this figure had increased to 81 percent. Similarly, the proportion of women who know of male condoms grew from 51 percent among all women to 83 percent in 1999. Generally, the level of knowledge among all women has increased since 1996 for all methods except vaginal contraceptives (diaphragm/foam/jelly), which declined from 31 percent in 1996 to 21 percent in 1999. The largest increases in knowledge among women over the three-year period between 1996 and 1999 occurred for implants (from 24 percent to 40 percent), male condoms (from 72 percent to 83 percent), and injectables (from 71 percent to 81 percent).

For men, the increase in the proportion who have heard of any method has been less steep than for women—from 89 percent in 1996 to 93 percent in 1999. Still, the level of knowledge has increased since 1996 for all methods except vaginal contraceptives (which declined from 35 to 15 percent of all men) and male sterilisation (which declined from 35 to 33 percent). Both women and men registered a substantial level of knowledge of the female condom, which was not asked about in prior surveys.

4.3 Ever Use of Family Planning Methods

All women and men interviewed in the 1999 TRCHS who said that they had heard of a contraceptive method were asked if they had ever used that method. In this context, ever use refers

to the use of a contraceptive method at any time with no distinction between past and current use. Tables 4.3.1 and 4.3.2 show the percentage of women and men who have ever used contraceptive methods, according to method, age, and marital status.

The results show that 41 percent of women 15-49 have used a contraceptive method at some time in their lives. Women have used modern methods more frequently (30 percent) than traditional methods (21 percent). The modern contraceptive methods commonly used by women are the pill (16 percent), injectables (12 percent), and male condoms (11 percent); while the traditional methods commonly used by women are withdrawal (11 percent), periodic abstinence (8 percent) and lactational amenorrhoea (4 percent). Ever use of any contraceptive method is higher for sexually active unmarried women (52 percent) than for currently married women (47 percent).

With regard to men (Table 4.3.2), the results show that almost half (48 percent) of all men have used a method at some time, with modern methods having been used more frequently (38 percent) than traditional methods (26 percent). The modern contraceptive methods commonly used by men are the male condom (28 percent), the pill (12 percent), and injectables (7 percent); while the traditional methods commonly used by men are withdrawal (15 percent) and periodic abstinence (14 percent). As opposed to what is observed among women, ever use of any contraceptive is higher for currently married men (60 percent) than sexually active unmarried men (48 percent). However, the order is reversed for ever use of any modern contraceptive, which is slightly higher among sexually active unmarried men (46 percent) than among currently married men (44 percent).

Table 4.3.1 Ever use of contraception: women

Percentage of all women, of currently married women, and of sexually active unmarried women who have ever used a contraceptive method, by method and age, Tanzania 1999

Age	Any method	Modern method: Any modern method	Pill	IUD	Injectables	Male condom	Female condom	Female sterilisation	Implant	Traditional method: Any traditional method	Periodic abstinence	Withdrawal	LAM	Other methods	Number of women
ALL WOMEN															
15-19	13.3	10.1	1.8	0.0	1.7	7.6	0.3	0.0	0.0	5.2	3.0	1.8	0.6	0.3	909
20-24	46.1	35.9	18.3	0.7	11.8	17.1	0.1	0.1	0.2	21.7	10.1	11.8	2.8	1.1	811
25-29	52.3	39.8	23.6	2.9	19.2	13.6	0.3	1.0	0.8	25.4	10.6	14.1	5.6	3.3	749
30-34	51.5	37.2	24.4	2.7	16.4	9.1	0.0	1.7	0.8	25.9	8.3	13.3	5.2	6.9	490
35-39	50.0	35.0	19.9	1.6	14.8	12.5	0.0	2.0	0.3	30.0	7.8	17.7	10.1	4.8	456
40-44	50.6	35.3	21.2	2.1	15.0	6.0	0.0	5.9	0.7	30.7	11.4	16.3	4.2	6.8	299
45-49	36.6	24.4	14.6	4.7	10.3	1.8	0.0	6.0	0.0	18.8	8.2	7.9	2.9	3.3	315
Total	40.5	29.9	16.4	1.7	11.9	10.8	0.1	1.5	0.4	20.6	8.1	10.9	4.1	3.1	4,029
CURRENTLY MARRIED WOMEN															
15-19	24.5	15.5	5.3	0.2	3.6	8.8	0.0	0.0	0.0	11.8	6.5	4.4	1.6	0.3	227
20-24	45.0	32.6	17.9	0.5	11.8	12.5	0.0	0.1	0.0	22.1	8.0	13.1	3.8	1.4	550
25-29	52.1	38.6	23.1	2.8	18.7	12.7	0.1	1.3	0.9	24.5	9.7	14.3	5.6	3.2	615
30-34	52.8	37.4	24.0	2.4	16.5	7.5	0.0	2.0	0.9	26.9	8.3	14.7	4.8	7.4	407
35-39	50.6	33.4	19.8	1.0	14.9	11.0	0.0	1.6	0.0	33.4	8.4	19.8	11.6	5.4	364
40-44	48.8	31.8	18.5	1.2	16.3	5.0	0.0	5.4	0.9	29.7	9.4	18.9	3.8	5.3	239
45-49	40.3	26.8	14.8	5.5	11.3	1.3	0.0	7.1	0.0	20.6	9.3	9.0	2.3	3.6	251
Total	46.7	32.7	19.0	1.9	14.2	9.5	0.0	2.0	0.4	24.6	8.6	13.9	5.1	3.8	2,653
SEXUALLY ACTIVE, UNMARRIED WOMEN															
Total	51.9	44.4	24.8	1.8	13.3	25.9	0.7	0.1	0.4	27.1	12.9	10.5	2.5	4.9	366

Note: Less than one-half of one percent of women reported ever using diaphragm/foam/jelly.
LAM = Lactational amenorrhoea method

There has been a gradual increase in the level of ever use of modern contraceptives among women and men in recent years. In 1991-92, 14 percent of all women had used a modern method at some time, compared with 21 percent in 1994, 23 percent in 1996, and 30 percent in 1999. Absolute increases in ever use were greatest for injectables. Among men, ever use of a modern contraceptive method increased from 20 percent in 1991-92 to 24 percent in 1994, 26 percent in 1996, and to 38 percent in 1999. The increase in ever use was greatest for the male condom.

4.4 CURRENT USE OF FAMILY PLANNING METHODS

Level of Contraceptive Use

The level of current use of contraceptive methods is one of the indicators most frequently used to assess the success of family planning programme activities. It is also widely used as a measure in analysing the determinants of fertility. This section focuses on the levels and differentials in current use of family planning with particular emphasis on the method mix among users. Trends in contraceptive use in Tanzania are also described.

Table 4.3.2 Ever use of contraception: men

Percentage of all men, of currently married men, and of sexually active unmarried men who have ever used a contraceptive method, by method and age, Tanzania 1999

Age	Any method	Modern method								Traditional method					Number of men
		Any modern method	Pill	IUD	Inject-ables	Male condom	Female condom	Female sterili-sation	Im-plant	Any tradi-tional method	Periodic absti-nence	With-drawal	LAM	Other methods	
ALL MEN															
15-19	17.8	16.5	1.4	0.0	0.4	16.0	0.3	0.0	0.1	5.3	2.6	3.3	0.0	0.2	790
20-24	48.7	44.2	4.9	0.0	1.9	42.0	1.4	0.1	0.4	17.9	8.6	11.1	0.2	0.5	540
25-29	63.9	53.8	18.9	0.5	12.4	41.4	1.6	0.0	0.1	30.5	16.0	16.2	5.5	2.3	546
30-34	54.3	41.4	14.9	2.0	8.2	31.3	1.3	0.4	0.0	31.5	17.8	20.1	3.8	3.8	371
35-39	66.5	50.7	18.2	1.4	12.4	36.5	0.3	1.6	0.7	40.1	21.4	24.3	8.8	3.3	445
40-44	59.5	43.0	25.0	2.2	9.0	23.6	0.3	5.2	0.0	44.0	24.4	23.3	10.1	7.4	219
45-49	52.6	35.6	16.6	1.1	13.2	17.5	0.0	3.7	0.0	39.5	20.2	25.2	4.1	4.7	259
50-54	53.7	35.6	13.7	5.1	8.8	12.9	0.0	5.9	1.1	37.6	16.9	18.4	3.8	11.0	201
55-59	47.9	20.0	10.2	0.2	7.2	4.4	0.0	5.0	0.0	35.8	17.3	12.0	10.5	7.2	171
Total	48.2	37.7	11.9	1.0	7.1	27.9	0.7	1.4	0.3	26.4	13.7	15.0	4.0	3.1	3,542
CURRENTLY MARRIED MEN[1]															
20-24	55.9	45.8	10.0	0.0	3.9	40.2	1.5	0.0	1.0	25.3	12.3	15.9	0.7	1.6	158
25-29	65.1	52.4	21.4	0.7	14.0	36.6	1.5	0.0	0.1	35.3	18.1	18.6	7.0	2.9	401
30-34	55.5	41.7	15.8	2.2	9.1	30.5	1.5	0.4	0.0	32.1	17.8	19.7	3.9	4.2	334
35-39	69.3	52.4	18.7	1.2	14.4	36.5	0.3	1.8	0.8	43.2	23.7	26.6	10.0	2.9	381
40-44	62.8	44.1	27.4	1.9	9.1	22.1	0.0	6.0	0.0	47.7	26.8	24.8	11.1	8.4	193
45-49	53.2	35.5	16.3	1.0	14.2	16.3	0.0	4.1	0.1	41.6	21.4	25.9	4.4	4.9	236
50-54	56.4	37.3	14.6	5.5	9.4	12.8	0.0	6.3	1.1	40.1	18.2	19.5	4.1	11.8	187
55-59	52.1	21.9	11.3	0.3	8.0	4.6	0.0	5.5	0.0	38.8	18.4	12.7	11.6	7.9	154
Total	60.0	43.5	17.5	1.5	11.1	27.5	0.7	2.4	0.4	37.9	19.9	21.0	6.7	4.9	2,063
SEXUALLY ACTIVE, UNMARRIED MEN															
Total	48.4	45.9	8.1	0.5	1.8	44.0	1.4	0.1	0.1	16.0	6.3	11.4	0.7	0.5	551

Note: One-tenth of one percent of men reported ever using diaphragm/foam/jelly.
LAM = Lactational amenorrhoea method
[1]There are too few married men age 15-19 to show separately.

Overall, 22 percent of all women in Tanzania are currently using a contraceptive method, with 16 percent using modern methods (Table 4.4.1). The most widely used methods are injectables (5 percent), the pill (5 percent), and the male condom (4 percent). Less than 2 percent of women have been sterilised. Seven percent of women are currently using traditional methods, the most popular among these being withdrawal (3 percent).

Contraceptive use is lowest among teenagers (15-19 years) and older women (45-49 years); at all other age groups, use is surprisingly constant at 26-29 percent of women. The lower levels of contraceptive use among younger women may reflect lower levels of sexual activity or a desire to start their families, while the drop in contraceptive use among older women may reflect declining fecundity or lower levels of sexual activity. Male condoms are the most popular contraceptives currently used by teenage women (15-19 years), while the pill and injectables are the most widely used methods among women 20-39 years. Among women in their early 40s,

Table 4.4.1 Current use of contraception: women

Percent distribution of all women, of currently married women, and of sexually active unmarried women by contraceptive method currently used, according to age, Tanzania 1999

		Modern method						Traditional method							
Age	Any method	Any modern method	Pill	IUD	Inject-ables	Male condom	Female sterili-sation	Any tradi-tional method	Periodic absti-nence	With-drawal	LAM	Other methods	Not currently using	Total	Number of women
							ALL WOMEN								
15-19	7.7	5.8	1.1	0.0	0.7	3.7	0.0	1.9	1.2	0.4	0.3	0.3	92.3	100.0	909
20-24	29.4	22.0	8.2	0.3	7.2	6.0	0.1	7.4	2.9	2.8	1.7	0.2	70.6	100.0	811
25-29	26.0	18.3	5.4	0.7	7.5	3.5	1.0	7.7	1.9	3.3	1.3	1.4	74.0	100.0	749
30-34	27.5	17.8	7.7	0.7	6.6	0.7	1.7	9.7	3.4	3.3	2.2	1.2	72.5	100.0	490
35-39	27.5	19.0	5.5	0.3	5.9	5.3	2.0	8.4	1.5	3.5	2.5	0.9	72.5	100.0	456
40-44	28.7	16.1	1.3	0.2	8.0	0.7	5.9	12.6	4.2	5.0	1.0	2.4	71.3	100.0	299
45-49	15.4	12.3	0.5	1.6	3.5	0.7	6.0	3.1	1.4	0.6	0.3	0.9	84.6	100.0	315
Total	22.3	15.6	4.6	0.5	5.4	3.5	1.5	6.7	2.2	2.5	1.3	0.9	77.7	100.0	4,029
							CURRENTLY MARRIED WOMEN								
15-19	10.6	6.5	2.9	0.0	2.1	1.4	0.0	4.1	1.3	1.7	1.1	0.0	89.4	100.0	227
20-24	28.4	20.4	8.4	0.3	6.8	4.9	0.1	8.0	2.6	3.0	2.4	0.0	71.6	100.0	550
25-29	24.9	16.4	4.1	0.3	7.6	3.1	1.3	8.5	1.6	4.0	1.5	1.5	75.1	100.0	615
30-34	29.5	19.1	8.9	0.9	6.2	0.5	2.0	10.4	3.5	3.9	2.2	1.2	70.5	100.0	407
35-39	28.4	18.5	5.9	0.0	5.6	5.3	1.6	10.0	1.7	4.4	3.1	0.8	71.6	100.0	364
40-44	30.7	17.2	1.3	0.0	9.8	0.7	5.4	13.6	3.6	6.3	1.2	2.5	69.3	100.0	239
45-49	16.9	13.5	0.6	2.1	3.3	0.3	7.1	3.5	1.3	0.7	0.3	1.1	83.1	100.0	251
Total	25.4	16.9	5.3	0.4	6.3	2.7	2.0	8.5	2.2	3.5	1.9	1.0	74.6	100.0	2,653
							SEXUALLY ACTIVE, UNMARRIED WOMEN								
Total	33.0	26.1	9.3	0.7	5.5	9.5	0.1	7.0	4.9	0.6	0.5	2.0	67.0	100.0	366

LAM = Lactational amenorrhoea method

injectables are clearly the most popular method, whereas women in their late 40s are more likely to have been sterilised.

Current use of contraception among men is slightly higher than among women. Twenty-nine percent of all men age 15-59 in Tanzania are currently using a contraceptive method, with 21 percent using modern methods and 9 percent using traditional methods (Table 4.4.2). The contraceptive methods most widely used by men are the male condom (12 percent), periodic abstinence (4 percent), and the pill (4 percent). The major difference in current use among women and men is the proportionally higher use of male condoms and periodic abstinence by men.

Among women, current use of any contraceptive method is higher among married women (25 percent) than among all women (22 percent), but it is highest among unmarried sexually active women, 33 percent of whom are using some method. Among men, married men are the

Table 4.4.2 Current use of contraception: men

Percent distribution of all men, of currently married men, and of sexually active unmarried men by contraceptive method currently used, according to age, Tanzania 1999

Age	Any method	Modern method: Any modern method	Pill	IUD	Injectables	Male condom	Female sterilisation	Traditional method: Any traditional method	Periodic abstinence	Withdrawal	LAM	Other methods	Not currently using	Total	Number of men
ALL MEN															
15-19	11.8	11.0	0.2	0.0	0.1	10.6	0.0	0.8	0.6	0.3	0.0	0.0	88.2	100.0	790
20-24	25.7	23.5	1.9	0.0	0.5	20.9	0.1	2.2	1.9	0.3	0.0	0.2	74.3	100.0	540
25-29	40.1	28.4	7.2	0.0	4.9	16.0	0.0	11.7	5.6	2.6	3.5	0.3	59.9	100.0	546
30-34	32.9	22.1	7.7	0.9	3.3	9.7	0.4	10.8	5.3	4.2	0.9	0.5	67.1	100.0	371
35-39	40.6	27.5	6.4	0.4	4.7	14.6	1.3	13.1	3.7	5.8	2.6	1.0	59.4	100.0	445
40-44	43.6	25.8	7.3	0.4	4.5	8.3	5.2	17.7	7.8	3.9	4.9	1.1	56.4	100.0	219
45-49	36.4	20.2	3.6	0.0	7.0	5.8	3.7	16.2	9.7	4.6	1.5	0.5	63.6	100.0	259
50-54	27.1	17.2	2.3	1.5	4.8	2.9	5.7	9.9	5.0	1.2	1.8	1.8	72.9	100.0	201
55-59	24.0	12.5	2.4	0.0	5.1	0.0	5.0	11.5	5.9	2.3	3.3	0.0	76.0	100.0	171
Total	29.3	20.8	4.0	0.3	3.1	12.0	1.4	8.5	4.1	2.4	1.6	0.5	70.7	100.0	3,542
CURRENTLY MARRIED MEN[1]															
20-24	22.7	17.7	4.9	0.0	1.5	11.3	0.0	5.0	4.9	0.0	0.0	0.0	77.3	100.0	158
25-29	41.7	26.1	8.6	0.0	6.2	11.0	0.0	15.6	7.2	3.5	4.8	0.5	58.3	100.0	401
30-34	34.9	23.0	8.6	1.0	3.7	9.3	0.4	11.9	5.8	4.6	1.0	0.5	65.1	100.0	334
35-39	43.8	28.5	7.3	0.5	5.5	13.7	1.5	15.3	4.3	6.7	3.1	1.2	56.2	100.0	381
40-44	47.2	27.0	8.3	0.5	5.1	7.1	6.0	20.2	8.9	4.5	5.6	1.2	52.8	100.0	193
45-49	37.9	20.1	3.7	0.0	7.7	4.6	4.0	17.9	10.6	5.1	1.6	0.6	62.1	100.0	236
50-54	29.0	18.4	2.4	1.6	5.1	3.1	6.1	10.6	5.4	1.3	2.0	1.9	71.0	100.0	187
55-59	25.7	13.9	2.7	0.0	5.7	0.0	5.5	11.9	6.3	2.0	3.6	0.0	74.3	100.0	154
Total	37.0	23.0	6.4	0.4	5.2	8.6	2.3	14.0	6.6	3.9	2.8	0.8	63.0	100.0	2,063
SEXUALLY ACTIVE, UNMARRIED MEN															
Total	30.5	29.5	1.7	0.0	0.3	27.2	0.1	1.0	0.3	0.7	0.0	0.2	69.5	100.0	551

LAM = Lactational amenorrhoea method
[1] There are too few married men age 15-19 to show separately

most likely to be using a method (37 percent), while unmarried sexually active men are only slightly more likely than all men to be using a method (31 versus 29 percent). The male condom is the overwhelming choice among unmarried sexually active men (27 percent) and it is more popular than the pill among unmarried sexually active women. This preference for the male condom among unmarried women and men suggests that it is a popular method for premarital sex because of the dual protection it offers: protection from pregnancy and protection from sexually transmitted diseases.

Table 4.5.1 Current use of contraception by background characteristics: women

Percentage distribution of all women by contraceptive method currently used, according to selected background characteristics, Tanzania 1999

Background characteristic	Any method	Modern method: Any modern method	Pill	IUD	Injectables	Male condom	Female sterilisation	Traditional method: Any traditional method	Periodic abstinence	Withdrawal	LAM	Other methods	Not currently using	Total	Number of women
Residence															
Urban	33.0	28.9	8.9	1.2	9.9	6.7	1.8	4.1	2.8	0.8	0.0	0.9	67.0	100.0	1,122
Rural	18.2	10.5	3.0	0.2	3.6	2.2	1.4	7.7	2.0	3.1	1.8	0.9	81.8	100.0	2,907
Mainland/Zanzibar															
Mainland	22.5	15.7	4.6	0.5	5.4	3.5	1.6	6.8	2.2	2.5	1.3	0.9	77.5	100.0	3,929
Urban	33.4	29.3	8.9	1.2	10.0	6.9	1.8	4.1	2.9	0.8	0.0	0.9	66.6	100.0	1,088
Rural	18.3	10.6	2.9	0.2	3.6	2.3	1.5	7.8	2.0	3.2	1.8	0.9	81.7	100.0	2,841
Zanzibar	13.6	10.9	4.8	0.6	3.9	1.1	0.7	2.7	1.2	0.9	0.4	0.2	86.4	100.0	100
Pemba	6.8	4.9	1.1	0.2	2.5	0.0	1.1	2.0	1.0	0.8	0.2	0.0	93.2	100.0	44
Unguja	18.9	15.6	7.6	0.8	4.9	2.0	0.3	3.3	1.4	0.9	0.5	0.4	81.1	100.0	56
Education															
No education	14.0	6.8	1.8	0.2	2.5	1.3	1.0	7.2	1.4	3.2	1.7	0.9	86.0	100.0	1,093
Incomplete primary	17.8	11.7	3.8	0.3	3.2	2.0	2.2	6.1	2.5	1.6	1.3	0.9	82.2	100.0	854
Complete primary	26.8	20.5	6.4	0.3	7.9	4.5	1.3	6.3	2.0	2.5	1.2	0.8	73.2	100.0	1,866
Secondary +	42.8	33.5	6.3	3.9	6.7	12.0	3.5	9.2	6.3	2.4	0.0	1.6	57.2	100.0	215
No. of living children															
None	7.3	5.9	1.7	0.0	0.1	3.9	0.0	1.4	1.4	0.0	0.0	0.3	92.7	100.0	1,104
1	28.0	20.8	6.6	1.0	6.2	5.6	1.2	7.2	2.9	3.0	1.2	0.3	72.0	100.0	733
2	26.4	19.7	6.4	0.6	9.4	1.9	1.1	6.7	2.3	2.0	1.9	0.8	73.6	100.0	618
3	29.1	21.5	4.9	0.6	6.6	6.4	2.6	7.6	2.7	2.8	1.2	1.2	70.9	100.0	427
4	25.6	18.2	6.1	0.0	7.1	3.4	1.6	7.4	1.1	2.6	2.0	1.7	74.4	100.0	381
5	28.5	18.0	7.8	0.1	8.2	0.5	1.4	10.5	2.0	6.6	1.1	0.8	71.5	100.0	276
6+	30.3	16.2	2.7	1.1	6.8	0.5	5.1	14.1	3.4	5.2	3.2	2.2	69.7	100.0	489
Total	22.3	15.6	4.6	0.5	5.4	3.5	1.5	6.7	2.2	2.5	1.3	0.9	77.7	100.0	4,029

LAM = Lactational amenorrhoea method

Differentials in Contraceptive Use

Some women are more likely to use contraceptive methods than others (Table 4.5.1 and Figure 4.2). The proportion of women currently using contraceptives in urban areas (33 percent) is almost double that of rural areas (18 percent). Among both rural and urban women, injectables are the most popular method, followed by the pill. The third most used contraceptive method is the condom among urban women and withdrawal among rural women. There are differences in the levels of current use between the Mainland and Zanzibar. Women who live in the Mainland are more likely to use a contraceptive method (23 percent) than women who live in Zanzibar (14 percent). Contraceptive use is particularly low in Pemba (7 percent), in comparison with Unguja (19 percent). Compared with the 1996 TDHS, contraceptive use has increased in all areas except Pemba, where it has remained unchanged.

Education is clearly related to the use of contraceptive methods. Only 14 percent of women with no formal education are currently using any contraceptive, compared with 18 percent of women with incomplete primary school, 27 percent of women who have completed primary school, and 43 percent of women with at least some secondary education. Women with no education are

Table 4.5.2 Current use of contraception by background characteristics: men

Percentage distribution of all men by contraceptive method currently used, according to selected background characteristics, Tanzania 1999

Background characteristic	Any method	Modern method: Any modern method	Pill	IUD	Injectables	Male condom	Female sterilisation	Traditional method: Any traditional method	Periodic abstinence	Withdrawal	LAM	Other methods	Not currently using	Total	Number of men
Residence															
Urban	38.5	31.8	6.8	0.6	3.9	19.0	1.2	6.7	4.1	1.4	1.2	0.2	61.5	100.0	941
Rural	26.0	16.8	3.0	0.1	2.8	9.5	1.4	9.2	4.1	2.8	1.8	0.6	74.0	100.0	2,601
Mainland/Zanzibar															
Mainland	29.7	21.1	4.0	0.3	3.1	12.2	1.4	8.6	4.1	2.4	1.7	0.5	70.3	100.0	3,452
Urban	39.0	32.3	6.9	0.6	4.0	19.4	1.3	6.7	4.1	1.4	1.2	0.2	61.0	100.0	909
Rural	26.3	17.0	3.0	0.1	2.9	9.6	1.4	9.3	4.1	2.8	1.8	0.6	73.7	100.0	2,543
Zanzibar	16.4	11.3	4.3	0.2	1.4	5.2	0.2	5.1	2.8	1.7	0.5	0.0	83.6	100.0	90
Pemba	9.9	3.7	1.4	0.3	0.5	1.0	0.6	6.2	3.6	1.7	0.8	0.0	90.1	100.0	36
Unguja	20.7	16.3	6.2	0.2	2.0	8.0	0.0	4.4	2.3	1.8	0.3	0.0	79.3	100.0	55
Education															
No education	14.9	8.6	1.7	0.0	1.6	2.8	2.5	6.3	3.0	1.5	1.5	0.3	85.1	100.0	495
Incomplete primary	22.7	15.1	3.3	0.4	2.2	7.3	1.8	7.7	3.7	2.2	1.2	0.6	77.3	100.0	1,000
Complete primary	34.5	24.8	4.6	0.0	3.7	15.8	0.7	9.6	4.5	2.8	2.0	0.3	65.5	100.0	1,791
Secondary +	46.8	38.8	7.5	2.0	5.0	21.6	1.8	8.1	4.6	2.1	0.7	1.4	53.2	100.0	256
No. of living children															
None	16.1	15.5	0.8	0.0	0.2	14.4	0.0	0.6	0.4	0.2	0.0	0.1	83.9	100.0	1,482
1	36.8	28.4	7.3	0.5	5.3	14.8	0.3	8.4	6.5	1.3	0.6	0.3	63.2	100.0	395
2	39.5	26.0	7.9	0.0	2.6	14.9	0.7	13.5	7.0	2.3	3.6	0.5	60.5	100.0	369
3	43.4	28.7	6.0	0.9	5.4	14.3	2.1	14.7	5.3	5.5	3.3	0.6	56.6	100.0	314
4	35.7	21.9	3.8	0.0	4.1	12.5	1.3	13.8	3.5	7.3	2.3	0.7	64.3	100.0	213
5	38.1	22.7	11.0	0.0	7.3	3.0	1.4	15.4	5.2	7.7	1.9	0.6	61.9	100.0	194
6+	38.7	20.6	4.3	0.7	6.5	3.5	5.6	18.2	9.2	3.6	4.0	1.4	61.3	100.0	574
Total	29.3	20.8	4.0	0.3	3.1	12.0	1.4	8.5	4.1	2.4	1.6	0.5	70.7	100.0	3,542

LAM = Lactational amenorrhoea method

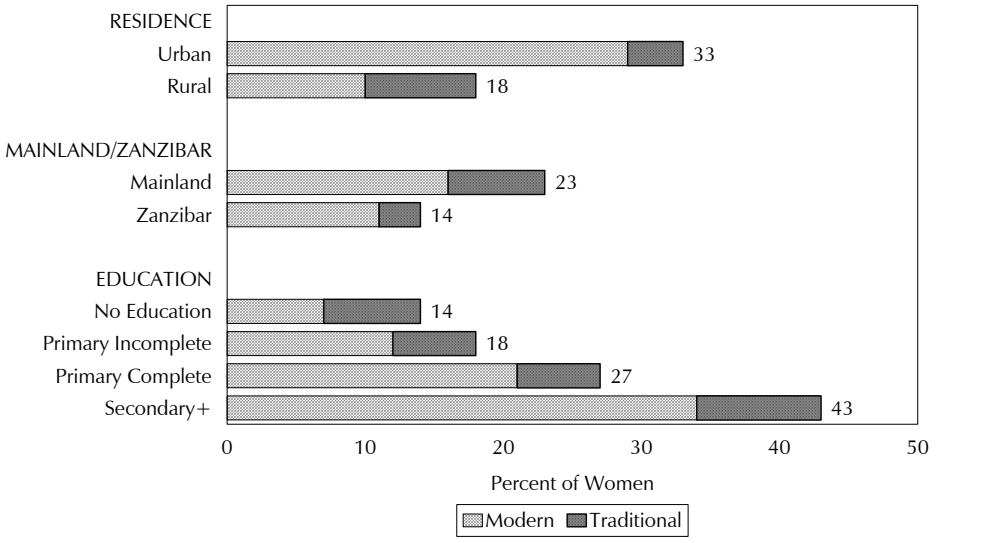
relatively more likely to rely on traditional methods such as withdrawal, while those with some education favour modern contraceptives such as injectables and pills. Women with some secondary education are most likely to use condoms, followed by injectables and periodic abstinence.

As expected, current contraceptive use rises with the number of living children. The percentage of women using any contraceptive increases rapidly from 7 percent among women with no living children to 28 percent among those with one child and only rises gradually to 30 percent among those with six or more children. Almost the same trend is observed for the current use of modern and traditional contraceptive methods.

Differentials in contraceptive use among men follow patterns similar to those that among women (Table 4.5.2).

Trends in Contraceptive Use

Figure 4.2 Contraceptive Use among All Women Age 15-49 by Residence and Education



TRCHS 1999

Contraceptive use has substantially increased over the past decade. In 1991-92, only 10 percent of all women were using any contraceptive method; that proportion has more than doubled to 22 percent (Figure 4.3). On the other hand, in 1991-92, current use of any modern

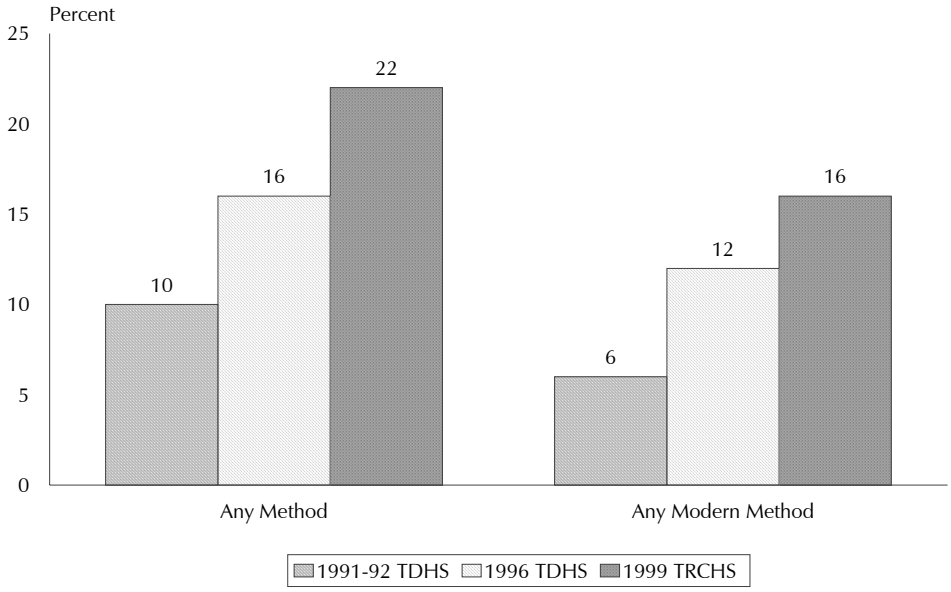
contraceptive method among all women was at 6 percent, and the percentage has almost tripled to 16 percent in 1999.

Focusing on specific methods, most notable is the steady rise in use of injectables, from less than 1 percent of women in 1991-92 to 5 percent in 1999. Use of male condoms has also increased from less than 1 percent of women in 1991-92 to about 4 percent in 1999. Two trends are of special note:

- **Use of female sterilisation.** In spite of the sizeable proportion of women who say that they do not want to have any more children, the proportion of women who have been sterilised has changed little.

- **Use of traditional methods.** Current use of traditional methods has increased from about 4 percent in 1991-92 to 7 percent in 1999, despite the increased knowledge of modern contraceptive methods since 1991-92.

Figure 4.3 Trends in Contraceptive Use among All Women Age 15-49, 1991-1999



4.5 Sources of Family Planning Methods

Women who reported using a modern contraceptive method at the time of the survey were then asked where they obtained the method the last time. It is likely that some women may have misreported the type of place where they obtained the method, since the distinction between hospitals, clinics, and sometimes between public and private sources may not be clear to them.

Table 4.6 shows that current users of modern contraceptives in Tanzania are more likely to obtain their supplies from the public (government) sector (67 percent) than the private medical sector (22 percent) or other private sources (11 percent). These results show that the public sector is the source of modern contraceptives to seven of every ten current users. Public sources include dispensaries which supply the bulk (27 percent) of the users, followed by government health centres (18 percent), district hospitals (13 percent), and regional hospitals (8 percent). About two in ten current users get their supplies from the private medical sector. The prominent institutions among this source are pharmacies (10 percent), religious/mission hospitals (5 percent), and private doctors and clinics/hospitals (4 percent). The type of source varies greatly by method. Those using methods requiring medical expertise like sterilisation and injectables are more likely to get them from the public sector. As expected, the majority of condom users obtain their supplies from private sources such as pharmacies and shops.

There has been some shift from public to private sources of contraception since 1991-92. However, the public sector has remained a dominant source of contraceptives, supplying almost all of the injectables (88 percent), pills (79 percent), and female sterilisations (70 percent).

4.6 CONTACT OF NONUSERS WITH FAMILY PLANNING PROVIDERS

Family planning fieldworkers who are largely based in rural areas are expected to visit women and men of reproductive age, especially those who are not using any modern contraceptive method. One of the objectives of such visits is to discuss the options and, when indicated, motivate the nonusers to adopt a method of family planning. Health facility and extension workers are also expected to visit or discuss and motivate families for family planning while providing other health

Table 4.6 Source of supply for contraceptive methods

Percent distribution of current users of modern contraceptive methods by most recent source of supply or information, according to specific method, Tanzania 1999

Source of supply	Pill	Inject-ables	Male condom	Female sterili-sation	All modern methods[1]
Public sector	79.4	88.1	18.1	69.8	67.2
Regional hospital	2.3	5.1	0.5	41.1	7.6
District hospital	12.6	15.9	4.0	24.8	13.1
Government health centre	27.7	26.7	3.2	0.0	18.3
Dispensary	34.1	40.5	7.8	3.9	26.9
Village health worker	2.6	0.0	2.5	0.0	1.3
Private medical	17.7	11.9	38.8	26.9	21.8
Mission hospital	3.7	4.3	0.0	25.4	5.3
Private hospital/clinic	0.3	6.7	3.0	1.5	3.8
Pharmacy	8.1	0.0	33.8	0.0	10.1
CBD worker	5.6	1.0	1.9	0.0	2.5
Other private	2.9	0.0	42.2	0.0	10.5
Shop	0.2	0.0	27.2	0.0	6.3
Friends/relatives	2.5	0.0	14.6	0.0	4.0
Health education/bar girls	0.0	0.0	0.4	0.0	0.1
Other	0.2	0.0	0.0	0.0	0.1
Don't know	0.0	0.0	1.0	0.0	0.2
Missing	0.0	0.0	0.0	3.3	0.3
Total	100.0	100.0	100.0	100.0	100.0
Number	186	216	140	62	630

CBD = Community-based distribution
[1]Total includes 19 IUD users, 4 implant users, and 3 female condom users

services. To get an indication of the frequency of such visits or discussions, women were asked whether a family planning fieldworker had visited them within the previous 12 months. Table 4.7 shows that not much has changed since the 1996 TDHS, with only 5 percent of nonusers having been visited by a family planning fieldworker during the 12 months preceding the survey.

In the 12 months preceding the survey, more than half (53 percent) of nonusers visited a health facility; however, only 14 percent of nonusers (or 27 percent of those who visited a facility) said that someone at the facility spoke to them about family planning. This finding gives insight into the level of missed opportunities (contacts between nonusers and health workers that were not used to motivate nonusers to adopt family planning). No one at the health facility spoke to three-quarters of the nonusers about family planning.

About eight in ten (81 percent) nonusers were neither visited by a family planning worker

nor spoken to about family planning when they visited a health facility. This lack of contact with family planning providers actually represents a slight improvement from the 1996 TDHS level of 87 percent. However, it still indicates there is a large pool of potential users of family planning that could be targeted for family planning counseling. To reach these potential users, a vigorous outreach programme is needed. With the onset of the decentralisation initiative focusing on the district and community levels, the approaches can include encouraging all health workers to discuss fertility preference issues and the option of family planning whenever the opportunity arises.

Table 4.7 Contact of nonusers with family planning providers

Percent distribution of nonusers by whether they were visited by a family planning (FP) worker or spoke with a health facility staff member about family planning methods during the 12 months prior to interview, according to selected background characteristics, Tanzania 1999

Background characteristic	Visited by family planning fieldworker: Visited health facility: Discussed FP	Visited by family planning fieldworker: Visited health facility: Did not discuss FP	Visited by family planning fieldworker: Did not visit health facility	Not visited by family planning fieldworker: Visited health facility: Discussed FP	Not visited by family planning fieldworker: Visited health facility: Did not discuss FP	Not visited by family planning fieldworker: Did not visit health facility	Missing	No FP services or information provided	Total	Number of nonusers
Age										
15-19	0.8	0.3	1.1	5.3	29.6	62.9	0.1	92.4	100.0	839
20-24	2.1	0.7	0.6	21.9	36.9	37.6	0.3	74.5	100.0	572
25-59	6.0	1.3	0.6	20.9	39.1	32.1	0.0	71.2	100.0	554
30-34	2.5	1.4	1.6	20.2	36.7	37.7	0.0	74.4	100.0	355
35-39	1.9	3.4	1.1	15.8	38.3	39.5	0.0	77.8	100.0	331
40-44	3.8	0.9	1.9	13.2	34.7	44.9	0.6	79.6	100.0	213
45-49	2.3	0.7	1.9	5.2	31.8	57.3	0.9	89.1	100.0	267
Residence										
Urban	5.8	3.1	3.2	13.2	37.7	36.9	0.1	74.6	100.0	752
Rural	1.6	0.4	0.4	14.8	34.0	48.6	0.2	82.6	100.0	2,379
Mainland/Zanzibar										
Mainland	2.6	1.0	1.1	14.4	34.4	46.4	0.2	80.7	100.0	3,044
Urban	5.9	3.1	3.2	13.1	37.0	37.6	0.1	74.6	100.0	724
Rural	1.5	0.4	0.4	14.8	33.5	49.1	0.2	82.7	100.0	2,320
Zanzibar	2.8	2.1	1.4	16.2	52.9	24.2	0.4	77.1	100.0	86
Pemba	1.5	0.8	1.1	14.5	55.2	26.1	0.8	81.3	100.0	41
Unguja	4.0	3.3	1.6	17.7	50.9	22.5	0.0	73.4	100.0	46
Education										
No education	1.2	0.1	0.5	12.1	34.1	51.6	0.4	85.7	100.0	940
Incomplete primary	2.2	0.8	0.6	11.3	30.2	54.6	0.2	84.9	100.0	702
Complete primary	3.7	1.3	1.6	17.5	37.5	38.4	0.0	76.0	100.0	1,365
Secondary +	3.3	7.6	3.1	15.5	37.9	32.1	0.5	70.0	100.0	123
Total	2.6	1.1	1.1	14.4	34.9	45.8	0.2	80.6	100.0	3,131

4.7 INTENTION TO USE FAMILY PLANNING AMONG NONUSERS

An important indicator of changing demand for contraception is the extent to which nonusers of contraception intend to use family planning services in the future. During the 1999 TRCHS, respondents who were not using contraception at the time of the survey were asked whether they intended to use a contraceptive method in the next 12 months.

Table 4.8 shows that 35 percent of women and 31 percent of men who were not using a

contraceptive reported that they intended to use one some time in the next 12 months. Intention to use among women seems to be related to the number of living children; it is lower among those without children and then rises with an increase in the number of children.

Table 4.8 Future use of contraception

Percent distribution of all women and men who are not using a contraceptive method by intention to use a method in the next 12 months, according to number of living children, Tanzania 1999

Future use of contraception	Number of living children[1]					Total women	Total men
	0	1	2	3	4+		
Intend to use in next 12 months	17.8	43.7	45.3	43.6	39.0	34.9	31.3
Unsure as to intention	19.3	5.2	5.3	5.6	4.9	9.4	12.5
Do not intend to use in next 12 months	62.2	50.7	49.4	50.3	55.6	55.3	55.5
Don't know/Missing	0.7	0.4	0.1	0.5	0.5	0.5	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women/men	934	544	453	329	871	3,131	2,503

[1] Includes current pregnancy

4.8 REASONS FOR NONUSE

Respondents who were not currently using any contraception and said they did not intend to use any method in the next 12 months were asked about their reasons for nonuse. Table 4.9 presents data on the main reasons for not using contraceptives given by both women and men.

A desire to have more children was the most prominent reason for nonuse among women (23 percent) and was commonly cited by men as well (22 percent). Among men, however, the most common reason for nonuse is not being married (33 percent). Other common reasons for nonuse among women and men are that the respondent is opposed to contraceptive use or that the respondent is not sexually active. The desire for children has been the major reason for nonuse of contraception among women since 1991-92. Menopause or hysterectomy are also common reasons for nonuse, especially among women and men age 30 and older.

4.9 EXPOSURE TO FAMILY PLANNING MESSAGES

The media, especially radio and television, are the major potential sources of information about family planning. To asses the effectiveness of such media for the dissemination of family planning information, all female and male respondents in the survey were asked if they had heard or seen messages about family planning on the radio, television, or in various print media during the six months before the interview.

Tables 4.10.1 and 4.10.2 show that, as in the 1996 TDHS, a higher proportion of men than women are exposed to family planning messages. Seven in ten men (70 percent) and 66 percent of women reported that they had heard or seen a family planning message in the past six months. Radio remains the most dominant of the media; less than 10 percent of respondents had seen a family planning message on television. Medical professionals are an important source of family planning information, especially among women (49 percent). Among women, the next most effective media are billboards, posters, and live dramas. Among men, the most important sources

of family planning information are radio, billboards, and medical staff (doctors, nurses). About one-third of women and men said they had not seen or heard a family planning message in the past six months.

Table 4.9 Reasons for not intending to use contraception

Percent distribution of all women and men who are not using a contraceptive method and who do not intend to use in the future, by main reason for not intending to use, according to age, Tanzania 1999

Reason for not intending to use contraception	Women			Men		
	Age		Total women	Age		Total men
	<30	30-49		<30	30-49	
Not married	28.3	2.2	16.6	54.5	8.3	32.6
No sex	19.2	6.3	13.4	16.3	3.2	10.1
Infrequent sex	3.1	6.9	4.8	5.3	5.2	5.3
Menopausal/hysterectomy	0.6	18.8	8.8	0.0	16.1	7.6
Subfecund/infecund	1.4	5.1	3.1	0.0	2.8	1.3
Postpartum/amenorrheic	1.5	3.8	2.5	0.6	2.5	1.5
Breastfeeding	4.4	1.6	3.2	0.6	1.5	1.0
Wants more children	22.0	23.2	22.6	16.3	27.4	21.6
Respondent opposed	19.7	22.0	20.7	12.7	24.3	18.2
Partner opposed	9.8	8.0	9.0	0.8	4.0	2.3
Others opposed	0.6	0.7	0.7	0.0	0.8	0.4
Religious prohibition	1.3	2.3	1.7	3.1	5.3	4.2
Knows no method	7.2	3.4	5.5	10.0	5.9	8.1
Knows no source	2.2	0.7	1.5	5.6	4.0	4.9
Health concerns	0.7	3.7	2.0	0.6	1.8	1.2
Fear side effects	7.4	7.5	7.5	2.9	7.1	4.9
Lack of access	0.4	0.5	0.4	0.0	0.0	0.0
Costs too much	0.1	0.3	0.2	0.4	0.1	0.3
Inconvenient to use	0.4	0.6	0.5	4.2	0.3	2.3
Interferes with body processes	1.3	2.8	2.0	0.6	2.7	1.6
Methods not reliable	4.1	2.7	3.5	0.0	0.0	0.0
Other	5.1	6.3	5.6	2.5	3.1	2.8
Don't know	2.6	0.4	1.6	1.8	1.0	1.4
Number of women/men	954	776	1,730	730	660	1,390

Exposure to family planning messages is higher among younger women and men than among older respondents, and it increases steeply with education level. Urban women and men are more exposed to family planning messages than respondents in the rural areas. Exposure to family planning messages is higher in Zanzibar than in the Mainland.

The pattern of exposure of family planning messages through radio and television by age has not changed since the 1996 TDHS. Also, the sharp contrast in exposure to family planning messages through radio and television still exists between urban and rural areas and between Mainland and Zanzibar. Access to family planning messages through radio and television is much higher in Zanzibar than in the Mainland for both women and men.

Table 4.10.1 Heard family planning message: women

Percentage of all women who heard a message about family planning in the six months preceding the interview, by source of message and selected background characteristics, Tanzania 1999

Background characteristic	Any source	Radio	TV	Newspaper/ magazine	Poster	Leaflet/ Pamphlet	Bill-board	Commu-nity events	Live drama	Doctor/ nurse	No message	Number of women
Age												
15-19	47.2	31.6	3.3	9.1	14.2	7.5	16.4	7.8	12.6	22.7	52.8	909
20-24	75.7	47.6	6.3	17.4	24.5	21.1	29.7	10.7	22.1	57.9	24.3	811
25-29	76.2	48.3	6.9	14.3	25.2	18.6	27.4	13.0	24.3	63.4	23.8	749
30-34	74.9	41.0	6.6	16.2	21.0	17.6	27.5	13.0	19.8	63.4	25.1	490
35-39	72.8	47.2	7.4	12.0	19.7	15.7	27.6	15.8	20.7	54.4	27.2	456
40-44	63.6	39.2	4.1	14.3	17.1	16.1	20.7	14.7	20.4	49.8	36.4	299
45-49	52.1	32.5	1.7	4.9	9.0	4.5	14.8	10.9	12.8	35.4	47.9	315
Residence												
Urban	84.6	63.3	15.0	29.4	39.1	29.3	44.9	16.4	43.3	61.8	15.4	1,122
Rural	59.1	33.0	1.7	6.7	12.0	9.3	15.8	9.8	9.7	43.9	40.9	2,907
Mainland/Zanzibar												
Mainland	65.9	41.1	4.8	12.9	19.6	14.9	23.9	11.6	18.5	48.9	34.1	3,929
Urban	84.5	63.2	13.9	29.6	39.4	29.5	45.3	16.5	42.7	62.1	15.5	1,088
Rural	58.8	32.6	1.4	6.5	12.0	9.3	15.6	9.7	9.3	43.8	41.2	2,841
Zanzibar	76.0	56.3	26.1	15.3	19.9	13.5	26.7	14.3	39.5	49.8	24.0	100
Pemba	69.9	46.1	15.4	12.0	13.9	9.9	23.7	15.2	24.8	49.3	30.1	44
Unguja	80.8	64.3	34.5	17.8	24.5	16.3	29.0	13.7	51.1	50.3	19.2	56
Education												
No education	46.1	23.5	1.5	0.8	3.5	1.2	9.4	7.8	7.1	34.4	53.9	1,093
Incomplete primary	59.4	34.5	2.6	6.0	16.0	8.5	16.7	9.8	12.9	41.3	40.6	854
Complete primary	78.0	51.3	5.5	18.4	26.5	22.9	31.9	13.1	24.7	59.2	22.0	1,866
Secondary +	92.1	74.8	34.6	55.9	55.2	39.9	57.2	25.6	55.6	63.7	7.9	215
Total	66.2	41.5	5.4	13.0	19.6	14.9	23.9	11.6	19.1	48.9	33.8	4,029

4.10 EXPOSURE TO REPRODUCTIVE AND CHILD HEALTH DRAMAS

Beginning in 1993, Radio Tanzania Dar es Salaam, the national radio station, started airing two radio soap operas carrying family planning messages. Airing of *Twende na Wakati* started in July 1993, and airing of *Zinduka!* began in October 1993. Since then, these programmes have been improved and several other radio dramas carrying reproductive health messages, including family planning and HIV/AIDS, have been developed and aired. Of special concern is the emergence of radio dramas targeting youth, such as *Vijana Wetu* and *Sema Naye*. As a measure of the success of the radio campaigns, respondents in the survey were asked to mention the radio programmes they had listened to in the past six months.

Table 4.11 shows that in general more men than women listen to the reproductive health dramas and that *Twende na Wakati* and *Zinduka!* are still the most popular radio dramas. The findings show that, in the six months preceding the survey, 34 percent of women and 47 percent of men had listened to *Zinduka!* During the same period, 31 percent of the women and 46 percent of the men had listened to *Twende na Wakati*. Other dramas that women have listened to include *Ukimwi Kifo* (29 percent), *Geuza Mwendo* (23 percent), *Vijana Wetu* (19 percent), and *Sema Naye* (18 percent). Other dramas that men have listened to include *Ukimwi Kifo* (40 percent), *Geuza Mwendo* (35 percent), *Vijana Wetu* (27 percent), and *Sema Naye* (26 percent).

Table 4.10.2 Heard family planning message: men

Percentage of all men who heard a message about family planning in the six months preceding the interview, by source of message and selected background characteristics, Tanzania 1999

Background characteristic	Any source	Radio	TV	Newspaper/ magazine	Poster	Leaflet/ Pamphlet	Bill-board	Commu-nity events	Live drama	Doctor/ nurse	No message	Number of men
Age												
15-19	53.3	42.2	6.3	14.3	18.9	13.5	20.2	8.7	20.9	14.3	46.7	790
20-24	72.0	61.6	9.2	30.3	32.2	24.5	36.9	19.1	35.7	28.1	28.0	540
25-29	77.1	62.9	12.2	29.9	31.9	25.2	37.5	20.8	33.0	34.1	22.9	546
30-34	78.8	65.2	13.0	33.1	34.6	26.7	40.5	21.5	37.0	41.6	21.2	371
35-39	77.6	65.3	12.9	36.4	40.7	26.4	41.1	27.6	35.7	42.7	22.4	445
40-44	79.4	64.5	11.6	32.7	38.0	23.8	42.2	23.7	37.5	46.1	20.6	219
45-49	66.9	53.7	5.9	22.4	23.0	16.2	33.7	19.7	18.9	29.3	33.1	259
50-54	71.9	60.1	7.2	27.8	28.3	15.4	27.4	20.9	25.2	39.1	28.1	201
55-59	61.3	53.1	6.0	13.1	21.3	9.4	26.0	19.5	19.5	27.0	38.7	171
Residence												
Urban	84.3	70.4	24.4	46.2	51.3	35.2	52.2	25.5	48.5	36.6	15.7	941
Rural	64.3	52.7	4.1	19.2	21.5	15.5	26.3	16.4	22.8	28.9	35.7	2,601
Mainland/Zanzibar												
Mainland	69.3	57.2	8.7	26.3	29.4	20.6	33.0	18.6	28.9	30.9	30.7	3,452
Urban	84.2	70.3	23.3	46.4	51.6	35.3	52.4	25.2	47.6	36.6	15.8	909
Rural	64.0	52.4	3.6	19.1	21.5	15.4	26.1	16.2	22.2	28.8	36.0	2,543
Zanzibar	81.1	66.7	39.3	28.2	31.1	24.1	40.1	28.9	58.4	34.9	18.9	90
Pemba	78.4	65.0	31.5	23.2	23.9	17.3	39.7	26.0	45.1	36.9	21.6	36
Unguja	82.9	67.8	44.3	31.5	35.7	28.6	40.3	30.8	67.1	33.6	17.1	55
Education												
No education	43.2	31.9	1.1	3.4	3.8	1.3	8.4	10.3	11.3	18.5	56.8	495
Incomplete primary	61.8	50.1	4.8	13.7	19.7	11.4	24.5	14.7	21.0	23.0	38.2	1,000
Complete primary	78.1	65.2	10.4	33.8	37.3	26.8	40.3	21.9	34.9	36.2	21.9	1,791
Secondary +	91.4	80.6	38.1	68.2	62.2	52.2	65.2	30.0	61.7	49.8	8.6	256
Total	69.6	57.4	9.5	26.3	29.4	20.7	33.2	18.8	29.6	31.0	30.4	3,542

Urban women and men are more likely to have listened to the reproductive health dramas than their rural counterparts. As level of education increases, both women and men are more likely to listen to any of the six reproductive health radio dramas. The *Vijana Wetu* and *Sema Naye* radio dramas tailored for youth attracted a higher proportion of young men than of young women. Since 1996, the proportion of women and men who have listened to *Zinduka!* has increased. For example, in 1996, 25 percent of women and 39 percent of men said they had listened to *Zinduka!;* in 1999, these figures were 34 and 47 percent, respectively. The proportion of women who have listened to *Twende na Wakati* has grown from 23 to 31 percent, while for men, the figures are 37 to 46 percent.

4.11 KNOWLEDGE OF FAMILY PLANNING LOGO

The national family planning logo—a green star—was developed and introduced in 1993. The objective of this logo is to promote use of family planning services. After the introduction of the logo, a number of efforts were made to promote it. Beginning in 1993, the logo was launched in four venues (Dar es Salaam, Arusha, Mwanza, and Mbeya), and logo promotional messages were disseminated in the print and electronic media. In late 1995 and early 1996, Green Star logo campaigns were launched, covering all regional headquarters that were not covered in 1993. During these campaigns, logo promotional messages were disseminated in the print and electronic media, live dramas were performed, and people were made aware of the logo throughout the country.

Table 4.11 Exposure to family planning dramas

Percentage of all women and men who have listened to specific family planning and health programmes on the radio during the six months prior to the interview, by selected background characteristics, Tanzania 1999

Background characteristic	Zinduka!	Twende na Wakati	Geuza Mwendo	Ukimwi Kifo	Sema Naye	Vijana Wetu	Number of women/men
			WOMEN				
Age							
15-19	29.2	24.7	18.7	25.2	13.1	14.5	909
20-24	38.6	36.4	26.1	33.1	20.9	21.3	811
25-59	39.4	38.6	29.2	35.5	22.7	22.4	749
30-34	33.8	29.5	23.7	30.6	20.0	19.9	490
35-39	34.1	33.6	24.5	27.0	18.6	21.4	456
40-44	27.7	27.5	21.8	27.9	15.2	21.4	299
45-49	22.8	20.3	12.7	18.3	12.2	14.0	315
Residence							
Urban	56.3	53.7	41.8	48.1	32.9	35.7	1,122
Rural	24.7	22.4	16.0	22.0	12.3	12.9	2,907
Mainland/Zanzibar							
Mainland	33.7	31.3	23.5	29.5	18.3	19.5	3,929
Urban	57.1	54.6	42.9	48.9	33.8	36.5	1,088
Rural	24.7	22.4	16.1	22.1	12.4	13.0	2,841
Zanzibar	26.2	23.4	8.8	19.4	6.0	9.4	100
Pemba	25.7	20.3	7.2	17.7	5.2	9.6	44
Unguja	26.6	25.7	10.1	20.8	6.7	9.2	56
Education							
No education	15.5	15.2	10.3	15.1	8.4	8.5	1,093
Incomplete primary	26.3	23.3	19.2	24.7	13.6	13.7	854
Complete primary	43.6	40.6	29.9	36.5	23.5	24.8	1,866
Secondary +	65.7	61.3	45.9	55.8	36.5	47.3	215
Total	33.5	31.1	23.2	29.2	18.0	19.2	4,029
			MEN				
Age							
15-19	38.3	32.7	28.2	29.2	18.5	19.1	790
20-24	51.6	50.0	40.3	45.3	31.2	31.9	540
25-59	54.4	51.6	39.1	42.7	29.5	29.2	546
30-34	54.1	55.3	43.3	45.8	27.2	27.6	371
35-39	51.8	52.9	38.3	46.1	34.2	34.4	445
40-44	53.9	54.1	35.7	51.4	21.5	30.3	219
45-49	39.1	42.3	31.3	39.3	22.2	25.2	259
50-54	42.2	41.9	32.3	35.4	27.8	24.4	201
55-59	30.1	35.1	26.9	33.8	23.4	21.7	171
Residence							
Urban	63.6	57.3	44.4	48.1	34.5	31.5	941
Rural	41.0	41.6	32.2	37.5	23.2	25.3	2,601
Mainland/Zanzibar							
Mainland	47.3	46.2	36.0	40.4	26.7	27.3	3,452
Urban	64.6	58.3	45.6	48.6	35.4	32.2	909
Rural	41.0	41.8	32.6	37.5	23.6	25.5	2,543
Zanzibar	37.2	31.4	13.1	35.1	10.1	15.0	90
Pemba	36.4	31.3	12.9	33.9	9.1	14.5	36
Unguja	37.7	31.5	13.2	35.9	10.7	15.3	55
Education							
No education	21.2	21.2	17.1	22.4	11.5	11.5	495
Incomplete primary	37.8	36.7	27.3	35.4	21.9	22.6	1,000
Complete primary	55.9	54.5	42.2	46.9	31.3	32.6	1,791
Secondary +	70.7	68.0	55.0	47.5	36.5	34.7	256
Total	47.0	45.8	35.4	40.3	26.2	27.0	3,542

Since these campaigns, promotional efforts have been maintained throughout the country. To measure the success of the promotion of the family planning logo, during the 1999 TRCHS survey, respondents were asked if they had seen or heard about the Green Star symbol, sources of that information, and their understanding of the logo.

Tables 4.12.1 and 4.12.2 show that more than half of women and men (55 percent of women and 51 percent of men) know about the Green Star logo. Among those who know about the logo, around 80 percent know that the Green Star logo is related to family planning. Most women learned about the Green Star family planning logo from clinic signs (52 percent) and the radio (43 percent). Women also learned about the Green Star logo from service providers (37 percent), billboards (18 percent), posters (15 percent), and leaflets (8 percent). Men overwhelmingly learned about the Green Star logo from the radio (69 percent). Far fewer men learned about the Green Star logo from billboards (23 percent), posters (20 percent), clinic signs (19 percent), service providers (19 percent), and leaflets (11 percent).

Table 4.12.1 Green Star logo family planning symbol: women

Percentage of women who know the Green Star (GS) logo, and of those, the percentage who know that it refers to family planning (FP) and the percentage who cited various sources where they heard of Green Star, by selected background characteristics, Tanzania 1999

Background characteristic	All women		Women who know Green Star logo							
	Knows Green Star logo	Number of women	Knows GS logo refers to FP	Source of knowledge about Green Star						Number of women
				Bill-board	Poster	Leaflets	Radio	Clinic sign	Service provider	
Age										
15-19	40.2	909	71.2	21.8	17.2	5.6	50.0	35.4	17.9	366
20-24	64.8	811	85.1	16.4	13.1	6.6	37.6	54.9	35.7	526
25-59	67.7	749	82.0	19.9	16.3	11.6	43.0	60.4	46.5	507
30-34	61.3	490	83.5	11.9	13.6	7.3	39.1	58.1	44.7	300
35-39	54.0	456	82.0	16.3	20.1	5.7	46.4	49.7	41.1	246
40-44	52.5	299	81.6	15.2	15.3	8.6	41.3	57.6	40.9	157
45-49	39.7	315	84.5	23.9	11.8	4.0	45.3	41.9	30.9	125
Residence										
Urban	79.6	1,122	89.0	28.0	22.3	11.3	54.7	54.1	37.0	893
Rural	45.9	2,907	76.1	11.0	10.8	5.1	34.8	51.0	37.3	1,334
Mainland/Zanzibar										
Mainland	55.9	3,929	81.4	17.9	15.6	7.6	42.8	52.5	37.3	2,196
Urban	80.8	1,088	89.2	28.3	22.6	11.4	54.9	54.4	37.1	879
Rural	46.4	2,841	76.2	11.1	10.9	5.1	34.7	51.3	37.5	1,318
Zanzibar	31.1	100	73.3	8.0	3.1	2.7	38.9	34.0	24.0	31
Pemba	22.7	44	64.6	2.1	3.7	1.8	29.7	27.1	21.9	10
Unguja	37.7	56	77.4	10.7	2.8	3.1	43.3	37.3	25.0	21
Education										
No education	32.1	1,093	71.7	11.3	10.9	1.2	25.2	49.5	38.6	351
Incomplete primary	46.2	854	75.7	13.4	14.6	5.4	42.3	46.0	29.0	394
Complete primary	69.7	1,866	84.2	18.5	15.6	8.9	45.0	56.2	39.6	1,301
Secondary +	84.2	215	91.4	34.9	25.0	14.6	62.1	43.4	34.0	181
No. of living children										
None	43.6	1,104	75.6	23.7	20.0	7.9	56.2	33.3	17.7	482
1	68.4	733	84.6	18.9	11.9	5.2	41.8	50.3	38.2	501
2	64.2	618	84.6	17.1	15.4	12.0	41.6	64.2	42.1	397
3	63.3	427	83.7	19.0	15.4	4.6	36.9	60.3	51.0	270
4	58.1	381	81.1	14.1	18.0	4.6	42.3	59.4	45.5	221
5	52.9	276	84.3	11.7	11.6	12.4	34.7	53.2	49.1	146
6+	42.9	489	74.9	9.6	13.5	7.7	30.1	59.4	35.0	210
Total	55.3	4,029	81.3	17.8	15.4	7.6	42.8	52.3	37.1	2,227

Table 4.12.2 Green Star logo family planning symbol: men

Percentage of men who know the Green Star (GS) logo, and of those, the percentage who know that it refers to family planning (FP) and the percentage who cited various sources where they heard of Green Star, by selected background characteristics, Tanzania 1999

Background characteristic	All men		Men who know Green Star logo							
	Knows Green Star logo	Number of men	Knows GS logo refers to FP	Source of knowledge about Green Star						Number of men
				Bill-board	Poster	Leaflets	Radio	Clinic sign	Service provider	
Age										
15-19	37.2	790	69.8	22.7	13.6	7.1	65.3	12.3	12.5	294
20-24	54.6	540	82.7	31.1	27.3	14.4	73.9	13.4	13.1	295
25-59	61.2	546	85.6	21.6	19.0	9.3	65.4	17.9	22.2	334
30-34	65.4	371	81.0	20.7	21.8	14.6	74.7	18.8	20.9	243
35-39	56.5	445	81.7	22.9	25.2	10.3	58.3	36.2	21.7	252
40-44	56.1	219	83.3	18.6	14.8	7.3	72.4	22.2	23.5	123
45-49	43.2	259	75.2	19.8	13.5	11.4	75.4	16.7	19.9	112
50-54	46.0	201	80.2	22.6	20.1	14.1	80.4	22.9	23.9	92
55-59	35.7	171	86.7	24.4	17.9	4.0	75.8	3.8	23.2	61
Residence										
Urban	74.0	941	88.6	36.5	29.0	15.0	70.8	16.5	19.1	696
Rural	42.6	2,601	75.2	14.9	14.5	8.0	68.3	20.5	18.9	1,109
Mainland/Zanzibar										
Mainland	51.5	3,452	80.4	23.3	20.3	10.8	69.2	19.1	19.0	1,779
Urban	75.3	909	88.8	36.6	29.4	15.2	70.8	16.7	19.1	685
Rural	43.0	2,543	75.2	15.0	14.6	8.0	68.3	20.6	19.0	1,094
Zanzibar	29.6	90	75.2	18.8	5.6	4.9	70.8	8.5	13.7	27
Pemba	22.5	36	60.6	4.6	5.2	2.4	61.3	9.5	16.3	8
Unguja	34.3	55	81.4	24.9	5.8	6.0	74.8	8.0	12.6	19
Education										
No education	25.8	495	62.2	9.3	2.6	4.8	68.7	13.9	13.1	128
Incomplete primary	38.4	1,000	74.2	18.1	16.8	8.3	72.0	16.6	13.1	384
Complete primary	60.5	1,791	82.4	24.1	21.1	11.2	67.9	20.3	19.1	1,084
Secondary +	81.7	256	92.5	36.5	31.8	16.0	71.7	19.2	32.4	209
No. of living children										
None	44.6	1,482	76.5	26.5	19.9	9.9	71.5	14.9	11.9	661
1	67.6	395	83.8	24.6	22.3	14.3	64.7	14.3	24.8	267
2	64.2	369	86.2	24.2	23.6	5.5	64.8	23.2	25.8	237
3	57.8	314	84.9	20.5	15.8	5.9	69.3	23.2	14.5	182
4	50.6	213	80.1	26.1	27.9	15.3	66.0	29.4	25.6	108
5	53.6	194	78.0	6.9	6.7	14.9	69.6	28.2	19.1	104
6+	42.9	574	79.0	19.6	20.4	13.8	73.7	19.0	25.2	246
Total	51.0	3,542	80.4	23.2	20.1	10.7	69.3	18.9	18.9	1,805

Education is highly related to knowledge of the Green Star family planning logo; 84 percent of women and 82 percent of men with some secondary education know about the logo as compared with 32 percent of women and 26 percent of men without any formal education. Urban women and men are more likely than rural residents to know the Green Star logo. Four in five women (80 percent) and 74 percent of men in urban areas know about the logo as compared with 46 percent of women and 43 percent of men in rural areas. Knowledge of the Green Star logo has increased substantially since 1996, from 36 to 55 percent of women and from 38 to 51 percent of men.

4.12 KNOWLEDGE OF SALAMA CONDOM

Women and men were asked during the survey whether they had ever heard of a condom called Salama, the brand that is sold through the social marketing programme. Results in Table 4.13 show that more men (62 percent) than women (49 percent) are aware of Salama condoms. Awareness of Salama condoms is slightly higher among younger women and men than among older respondents. Among both women and men, awareness of Salama condoms is considerably higher in urban than in rural areas. Three in four women (76 percent) in urban areas have heard of Salama condoms, compared with 39 percent in rural areas; 83 percent of men in urban areas are aware of Salama condoms, compared with 54 percent in rural areas. Awareness of Salama condoms improves greatly with education level among both women and men. More than eight in ten women (85 percent) with some secondary education know about Salama condoms, compared with 28 percent of women with no education. The same is true among men. Awareness of Salama condoms has increased slightly for women since 1996, from 43 to 49 percent; however, it has decreased slightly for men, from 65 to 62 percent.

Table 4.13 Knowledge of Salama condom

Percentage of all women and men who have heard or seen a message about Salama condoms in the six months preceding the survey, by selected background characteristics, Tanzania 1999

Background characteristic	All women		All men	
	Knows Salama condom	Number of women	Knows Salama condom	Number of men
Age				
15-19	38.9	909	50.4	790
20-24	60.6	811	72.8	540
25-59	56.9	749	72.8	546
30-34	52.5	490	69.2	371
35-39	50.6	456	70.0	445
40-44	42.6	299	60.8	219
45-49	33.6	315	46.8	259
50-54	NA	NA	49.4	201
55-59	NA	NA	40.2	171
Residence				
Urban	76.0	1,122	82.8	941
Rural	39.2	2,907	53.8	2,601
Mainland/Zanzibar				
Mainland	49.8	3,929	61.9	3,452
Urban	76.9	1,088	83.4	909
Rural	39.5	2,841	54.2	2,543
Zanzibar	34.0	100	47.8	90
Pemba	22.5	44	26.1	36
Unguja	42.9	56	62.0	55
Education				
No education	28.2	1,093	37.6	495
Incomplete primary	39.8	854	49.7	1,000
Complete primary	62.1	1,866	71.1	1,791
Secondary +	85.4	215	87.5	256
Marital status				
Never married	47.8	943	58.8	1,289
Currently married	49.0	2,653	63.2	2,063
Formerly married	55.9	433	61.4	190
Total	49.4	4,029	61.5	3,542

NA = Not applicable

4.13 ATTITUDES TOWARDS FAMILY PLANNING

Communication between partners is an important factor in the decision to use family planning. Table 4.14 shows that four in ten married women (43 percent) say they have not discussed family planning with their husbands in the year prior to the survey. About a quarter of the couples (23 percent) have discussed family planning once or twice within the past 12 months, and about a third (34 percent) discussed it more often. Discussions about family planning with husbands increase with the age of the woman up to 30 years and then gradually decrease. The likelihood of never having discussed family planning is higher among teenage women (55 percent) and women age 45-49 years (60 percent).

Table 4.14 Discussion of family planning with husband

Percent distribution of currently married nonsterilised women who know a contraceptive method by the number of times they discussed family planning with their husband in the past year, according to current age, Tanzania 1999

Age	Number of times family planning discussed with husband			Missing	Total	Number of women
	Never	Once or twice	More often			
15-19	55.2	27.1	17.4	0.3	100.0	201
20-24	38.4	26.7	34.4	0.5	100.0	535
25-29	38.3	24.6	36.9	0.2	100.0	592
30-34	40.2	21.3	38.2	0.3	100.0	400
35-39	41.9	21.4	36.6	0.0	100.0	350
40-44	47.8	19.6	32.6	0.0	100.0	229
45-49	59.7	12.8	26.0	1.5	100.0	223
Total	43.2	22.8	33.7	0.3	100.0	2,529

Decisions to start using a modern contraceptive, to continue use, and to switch to a more appropriate method are facilitated when couples have a positive attitude toward family planning. Attitudinal data were collected by asking married women whether they approve of couples using family planning and what they perceive as their husband's attitude toward family planning. This information is useful in formulating reproductive health policies since it indicates the extent to which further information, education, and communication (IEC) initiatives are needed to gain or increase acceptance of family planning. Generally, widespread disapproval of contraception acts as a barrier to adopting family planning initiatives.

During the survey, both women and men in the same household were interviewed, providing an opportunity to link the couples' responses. Table 4.15 shows the couples' approval of family planning according to age and education differences. The results show that, when linked, 72 percent of the couples are in agreement about family planning. In about two-thirds of the couples (66 percent), both spouses approve of family planning, and in less than one in ten couples (6 percent), both disapprove of family planning. Joint approval of family planning is highest among couples in which the husband is less than five years older than the wife (73 percent) and lowest when the wife is older than her husband (57 percent). Couples are more likely to jointly approve of family planning when both husband and wife are educated.

Table 4.16 shows to what extent wives and husbands report accurately on their spouse's attitudes. The findings show that, when wives and husbands report that their spouses approve of family planning, they are generally accurate. In 94 percent of the couples in which the wife reported that her husband approves of family planning, the husband also stated that he approves of family planning. Similarly, for 87 percent of the couples in which the husband reported that his wife approves of family planning, the wife actually does approve of family planning. However, in the cases in which the wife thinks that her husband does not approve, about two-thirds of the wives (67 percent) are wrong (actually the husband approves). Among couples in which the husband thinks that his wife does not approve, half of them were wrong (actually the wife approves).

Table 4.15 Attitudes of couples toward family planning

Percent distribution of couples by approval of family planning, according to age difference between spouses and level of education, Tanzania 1999

Age difference/ education	Both approve	Both disapprove	Wife approves, husband disapproves	Husband approves, wife disapproves	Don't know/ Missing	Total	Percentage of couples in agreement	Number of couples
Wife older	57.0	12.3	0.1	25.8	4.8	100.0	69.3	67
Husband older by:								
0-4 years	72.9	3.9	6.2	8.7	8.3	100.0	76.8	601
5-9 years	66.0	6.6	9.6	9.8	8.0	100.0	72.6	667
10-14 years	60.7	5.0	7.5	9.2	17.6	100.0	65.7	300
15 years +	59.2	7.2	11.7	12.4	9.5	100.0	66.4	185
Education								
Both not educated	29.9	17.7	15.2	10.8	26.3	100.0	47.6	185
Wife educated, husband not	49.7	8.7	21.6	9.3	10.8	100.0	58.4	101
Husband educated, wife not	55.1	8.4	4.8	17.1	14.5	100.0	63.6	352
Both educated	76.8	2.8	6.7	8.2	5.6	100.0	79.6	1,181
Total	66.4	5.7	8.0	10.2	9.7	100.0	72.1	1,820

Table 4.16 Spouse's perception of their spouse's approval of family planning

Percent distribution of couples by husband's and wife's actual attitude towards family planning, according to their spouse's perception of their attitude, Tanzania 1999

Perception	Spouse's actual attitude towards family planning			Total	Number of couples
	Approves	Disapproves	Unsure		
Wife's perception of husband's attitude					
Approves	93.8	5.2	1.1	100.0	911
Disapproves	66.7	31.0	2.3	100.0	459
Don't know	68.6	20.5	11.0	100.0	450
Total	80.7	15.5	3.8	100.0	1,820
Husband's perception of wife's attitude					
Approves	86.5	9.5	4.1	100.0	1,237
Disapproves	49.6	41.9	8.5	100.0	226
Don't know	56.0	24.4	19.6	100.0	358
Total	75.9	16.5	7.7	100.0	1,820

PROXIMATE DETERMINANTS OF FERTILITY 5

This chapter presents data concerning the principal factors other than contraception that affect a woman's risk of becoming pregnant. These factors include marriage, sexual intercourse, postpartum amenorrhoea, abstinence from sexual relations, and termination of exposure to pregnancy. Marriage and the beginning of sexual activities are important indicators of exposure of women to the risk of pregnancy. Postpartum amenorrhoea and abstinence from sexual relations affect the length of birth intervals. It is therefore important to study these factors to understand fertility.

5.1 CURRENT MARITAL STATUS

In this report, the term "marriage" includes both formal and informal unions. Informal unions are those in which a man and a woman stay together intending to have a lasting relationship, even if a formal civil or religious ceremony has not been conducted. Table 5.1 presents the current marital status of eligible women and men at the time of the survey.

The upper panel of Table 5.1 shows the distribution of women according to their current marital status. The table shows that 23 percent of women 15-49 in Tanzania have never married; 66 percent are currently married; and 11 percent are either widowed, divorced, or no longer living together with a partner. As expected, the proportion of women who have never married declines sharply with age from 73 percent of women age 15-19 to less than 3 percent of those age 35 years and above. Thus, marriage is almost universal in Tanzania.

The proportion of women currently married increases with age up to 30-34 and then declines. As expected, the proportion of women who are widowed or divorced increases with age, while that of women who are no longer living together does not show a clear pattern.

The lower panel of Table 5.1 shows that 36 percent of men age 15-59 have never been married; 58 percent are currently married; and 5 percent are either widowed, divorced, or separated. Men tend to marry at older ages than women, which is why the overall proportion of men who have never married is higher than that of women (36 percent of men compared with 23 percent of women); however, the proportion who eventually marry is as high for men as for women. For example, the proportion never married among men decreases from 97 percent among teenage males to less than 1 percent among those in their late 40s, or about the same level as for women.

A comparison of these findings with those from the 1996 Tanzania Demographic and Health Survey shows little change in marital status over the past few years.

5.2 AGE AT FIRST MARRIAGE

In many societies, marriage is highly associated with fertility since it directly affects the risk of conception. Biologically, a woman has a given number of years in which she can give birth. If she spends all those years in marriage, she will produce more children than if she spends only part of the period in marriage. As such, early marriage tends to lead to early childbearing, resulting in higher fertility rates. Table 5.2 presents the percentage of women and men who have married by specific ages and the median age at first marriage according to current age.

Table 5.1 Current marital status

Percent distribution of women and men by current marital status, according to age, Tanzania 1999

Age	Current marital status						Total	Number of women/men
	Never married	Married	Living together	Widowed	Divorced	Not living together		
WOMEN								
15-19	72.8	22.2	2.8	0.2	0.7	1.4	100.0	909
20-24	22.7	59.7	8.1	1.3	3.0	5.2	100.0	811
25-29	8.0	72.8	9.4	2.3	2.9	4.7	100.0	749
30-34	4.3	75.0	8.0	3.2	5.4	4.0	100.0	490
35-39	2.5	70.0	9.7	5.3	5.8	6.6	100.0	456
40-44	1.0	70.4	9.7	7.4	6.0	5.6	100.0	299
45-49	0.8	72.8	6.8	11.5	5.3	2.8	100.0	315
Total	23.4	58.5	7.3	3.2	3.5	4.1	100.0	4,029
MEN								
15-19	96.5	2.2	0.2	0.0	0.9	0.3	100.0	790
20-24	66.9	24.9	4.5	0.4	1.6	1.8	100.0	540
25-29	19.6	69.4	4.2	0.0	2.0	4.9	100.0	546
30-34	5.6	79.3	10.7	0.3	0.4	3.8	100.0	371
35-39	6.9	84.0	1.6	1.6	2.4	3.5	100.0	445
40-44	1.9	84.5	3.4	1.7	5.3	3.2	100.0	219
45-49	0.8	85.7	5.2	1.7	3.5	3.1	100.0	259
50-54	0.5	90.4	2.8	1.3	2.1	2.8	100.0	201
55-59	0.0	87.0	3.4	4.7	0.6	4.3	100.0	171
Total	36.4	54.6	3.6	0.8	1.8	2.7	100.0	3,542

Overall, almost half of women marry before age 18 and two-thirds marry before age 20. Although the median age at first marriage appears to have risen from 17 among women age 45-49 to about 19 among women age 20-24, much of this increase could be because of recall error on the part of older respondents. Compared with the 1991-92 and 1996 TDHS results, the median age at first marriage for women has remained almost the same at slightly over 18 years.

Men marry considerably later than women. The median age at first marriage for men age 25-59 is 24, almost six years later than the median of 18 for women. Only 19 percent of men age 25-59 were married by age 20, compared with 69 percent of women age 25-49. Compared with the 1996 TDHS results, the median age at first marriage for men has declined by one year, from 25 to 24.

Table 5.3 shows the median ages at first marriage for women age 20-49 and 25-49 years and men age 25-59 years by selected background characteristics. In all age groups, urban women and men marry later than their counterparts in rural areas. The median age at first marriage for women in the Mainland is at least one year higher than in Zanzibar; for men, there is no difference in median age at marriage between the Mainland and Zanzibar.

As expected, age at first marriage increases with increasing level of education. Among women age 25-49, the median age at first marriage for those with no formal education is 16.7 compared with 18.9 years for those who completed primary education and 23.2 years for those with secondary education or higher.

Table 5.2 Age at first marriage

Percentage of women age 15-49 and men age 15-59 who were first married by selected exact ages, and median age at first marriage, according to current age, Tanzania 1999

WOMEN

Current age	Percentage who were first married by exact age: 15	18	20	22	25	Percentage who had never married	Median age at first marriage	Number of women
15-19	3.9	NA	NA	NA	NA	72.8	a	909
20-24	6.4	39.3	61.8	NA	NA	22.7	19.0	811
25-29	9.7	42.4	62.5	79.2	90.1	8.0	18.8	749
30-34	9.9	44.9	68.2	81.8	88.8	4.3	18.5	490
35-39	14.3	49.8	66.7	80.8	91.6	2.5	18.0	456
40-44	22.1	61.2	78.9	87.3	92.7	1.0	16.8	299
45-49	18.2	57.5	76.9	85.3	92.7	0.8	17.3	315
Women 20-49	11.6	46.4	66.9	80.2	87.3	9.0	18.4	3,120
Women 25-49	13.4	48.9	68.7	82.0	90.8	4.2	18.1	2,309

MEN

Current age	Percentage who were first married by exact age: 20	22	25	28	30	Percentage who had never married	Median age at first marriage	Number of men
25-29	15.3	32.5	66.8	NA	NA	19.6	23.4	546
30-34	21.9	33.9	60.1	77.7	88.8	5.6	23.8	371
35-39	15.9	29.9	58.1	75.0	80.1	6.9	24.3	445
40-44	19.2	31.9	53.1	76.1	86.9	1.9	24.3	219
45-49	22.1	35.7	57.6	75.4	83.6	0.8	24.0	259
50-54	17.7	35.3	66.1	78.8	88.2	0.5	23.1	201
55-59	23.1	46.2	65.2	81.2	86.6	0.0	22.5	171
Men 25-59	18.5	33.8	61.3	77.4	84.0	7.5	23.7	2,212

NA = Not applicable.
[a] Omitted because less than 50 percent of women in age group 15-19 were first married by age 15.

5.3 AGE AT FIRST INTERCOURSE

In many societies, age at first marriage is often used as a proxy for the onset of women's exposure to the risk of conception. However, this is not the case in Tanzania, as many women and men engage in sexual activities before marriage. As such, the 1999 TRCHS collected information on the age at which men and women had their first sexual intercourse. Table 5.4 presents the percentage of women and men who had sexual intercourse by selected exact ages and the median age at first sexual intercourse.

The upper panel of the table shows that the median age at first intercourse for women is just under 17 years, more than one year less than the median age at first marriage of about 18 (Table 5.2). By age 15, about 20 percent of women have had sexual intercourse and by age 18—the legal age at marriage—68 percent of women have had sexual intercourse, whereas only 46 percent of them have married. By age 20, 85 percent of women have had sexual intercourse, although only 67 percent have ever been married by that age.

Table 5.3 Median age at first marriage

Median age at first marriage among women age 20-49 years, by current age and selected background characteristics, and among men age 25-59 years by selected background characteristics, Tanzania 1999

Background characteristic	Current age						Women age 20-49	Women age 25-49	Men age 25-59
	20-24	25-29	30-34	35-39	40-44	45-49			
Residence									
Urban	a	19.5	19.1	18.5	17.1	17.8	19.5	18.8	24.9
Rural	18.2	18.5	18.3	17.9	16.7	17.1	18.0	18.0	23.3
Mainland/Zanzibar									
Mainland	19.0	18.8	18.5	18.1	16.8	17.4	18.4	18.1	23.7
Urban	a	19.6	19.1	18.6	17.2	17.9	19.5	18.8	24.9
Rural	18.2	18.5	18.4	18.0	16.7	17.1	18.0	18.0	23.3
Zanzibar	19.1	17.9	17.7	16.3	15.2	14.8	17.3	16.9	23.6
Pemba	18.7	16.8	17.3	16.7	15.5	15.2	17.0	16.5	22.4
Unguja	19.3	18.3	17.9	15.9	15.1	14.6	17.5	17.1	24.3
Education									
No education	17.3	18.2	16.6	16.5	16.1	16.8	16.8	16.7	23.0
Incomplete primary	17.9	17.6	17.5	18.4	17.2	17.5	17.7	17.6	23.0
Complete primary	19.4	18.8	19.0	19.2	17.9	(20.0)	19.0	18.9	23.8
Secondary+	a	24.3	23.5	21.7	(22.2)	*	a	23.2	a
Total	19.0	18.8	18.5	18.0	16.8	17.3	18.4	18.1	23.7

[a] Omitted because less than 50 percent of respondents in the age group had married before entering the group.
Note: Figures in parentheses are based on 25 to 49 respondents (unweighted); an asterisk indicates that a figure has been suppressed because it is based on fewer than 25 respondents.

The lower panel of Table 5.4 shows that men become sexually active later than women. The median age at first intercourse among men is about 18. On average men enter into marriage six years later than women, but they start sexual relations only about one year later than women. Whereas the median age at first intercourse has increased slightly from 16.2 years among women age 45-49 to 16.8 years among those age 25-29, that of men declined from 18.1 years among those age 55-59 to 17.5 years among those age 20-24 years.

Table 5.5 shows differentials in the median age at first intercourse by background characteristics for women age 20-49 years and men age 25-59 years. Irrespective of the age of the woman, the median age at first intercourse among urban women is slightly higher than that of their counterparts in rural areas. There is no apparent urban-rural difference for men.

Although the median age at first sexual intercourse is slightly higher among women in Zanzibar than for those in the Mainland, the difference is much larger among men. Men in Zanzibar initiate sex about three years later than men in the Mainland. With respect to education, women with secondary education or higher start sexual relations three years later than those with no formal education.

Table 5.4 Age at first sexual intercourse

Percentage of women and men who had sexual intercourse by selected exact ages and median age at first intercourse, according to current age, Tanzania 1999

Current age	Percentage who had first intercourse by exact age: 15	18	20	22	25	Percentage who never had intercourse	Median age at first intercourse	Number of women/ men
				WOMEN				
15-19	14.5	NA	NA	NA	NA	47.4	a	909
20-24	16.5	65.4	85.6	NA	NA	6.2	a	811
25-29	18.0	66.0	83.2	91.0	94.3	1.1	16.8	749
30-34	16.2	63.4	82.8	86.2	88.8	0.8	16.9	490
35-39	22.1	71.8	86.4	93.0	94.9	0.3	16.3	456
40-44	32.9	74.1	88.8	93.1	95.8	0.0	16.0	299
45-49	21.9	70.7	86.3	91.4	95.8	0.0	16.2	315
Women 20-49	19.7	67.5	85.1	90.9	93.2	2.1	16.7	3,120
Women 25-49	20.9	68.3	84.9	90.7	93.6	0.6	16.6	2,309
				MEN				
15-19	23.9	NA	NA	NA	NA	43.4	a	790
20-24	14.4	56.6	81.5	NA	NA	10.5	17.5	540
25-29	12.2	53.7	75.3	89.9	97.5	1.3	17.6	546
30-34	14.4	54.4	80.7	90.6	95.1	0.5	17.6	371
35-39	9.3	53.3	73.8	86.2	94.4	0.6	17.7	445
40-44	13.2	51.3	79.1	89.1	94.0	1.0	17.9	219
45-49	7.3	48.5	78.9	90.1	95.3	0.1	18.1	259
50-54	8.7	42.2	64.1	78.6	87.1	0.5	18.4	201
55-59	11.8	48.5	74.7	89.1	97.1	0.0	18.1	171
Men 25-59	11.2	51.4	75.7	88.1	94.9	0.7	17.9	2,212

NA = Not applicable.
[a] Omitted because less than 50 percent of respondents in the age group 15 to 19 were first married by age 15.

5.4 RECENT SEXUAL ACTIVITY

The frequency of sexual intercourse is closely related to the probability of pregnancy, especially where use of contraception is low or not commonly practiced. Therefore, information on recent sexual activity is a useful measure of exposure to pregnancy. However, not all women and men who have ever had sex are currently sexually active. Tables 5.6.1 and 5.6.2 present information on the level of sexual activity of women and men in the four weeks prior to the survey by background characteristics.

In the four weeks before the survey, 59 percent of women age 15-49 years were sexually active, 12 percent were practicing postpartum abstinence, 17 percent were abstaining for reasons other than having recently given birth, and 12 percent had never had sexual intercourse.

Table 5.5 Median age at first intercourse

Median age at first sexual intercourse among women age 20-49 years, by age group and background characteristics, and among men age 25-59 by background characteristics, Tanzania 1999

Background characteristic	Current age						Women age 20-49	Women age 25-49	Men age 25-59
	20-24	25-29	30-34	35-39	40-44	45-49			
Residence									
Urban	17.2	17.1	17.8	16.8	16.5	16.7	17.1	17.0	17.9
Rural	16.8	16.7	16.7	16.2	16.0	16.0	16.5	16.4	17.9
Mainland/Zanzibar									
Mainland	16.9	16.8	16.9	16.3	16.1	16.3	16.7	16.6	17.8
Urban	17.1	17.1	17.8	16.8	16.5	16.7	17.0	17.0	17.8
Rural	16.8	16.7	16.6	16.2	16.0	16.0	16.5	16.4	17.8
Zanzibar	18.8	17.7	17.9	16.3	15.5	14.8	17.2	16.8	21.0
Pemba	19.2	16.6	18.0	16.9	16.8	15.0	17.3	16.8	22.2
Unguja	18.5	18.1	17.8	15.9	15.1	14.7	17.2	16.8	20.5
Education									
No education	16.2	16.4	15.5	15.7	15.6	16.1	15.9	15.8	17.4
Incomplete primary	16.2	16.4	16.6	15.9	16.5	16.0	16.2	16.3	18.0
Complete primary	17.0	16.9	17.2	17.4	16.4	(17.8)	17.0	17.0	17.8
Secondary+	19.2	18.8	19.6	18.2	(18.3)	*	18.9	18.8	18.5
All men/women	16.9	16.8	16.9	16.3	16.0	16.2	16.7	16.6	17.9

Note: Figures in parentheses are based on 25 to 49 respondents (unweighted); an asterisk indicates that a figure has been suppressed because it is based on fewer than 25 respondents.

The proportion of women who are sexually active varies little by age, except that the youngest women are far less likely to be having sexual intercourse. As expected, the proportion of women who are sexually active is lower for women who have never been in union than for women who are currently in union. However, there is no appreciable decline in the proportion sexually active according to the duration of marriage, except among those married for 30 years or more.

The proportion of women who are sexually active is higher in the Mainland than in Zanzibar. Recent sexual activity appears to decline with increasing education; however, the pattern is not straightforward. The proportion of women who are sexually active is highest among women with no formal education and lowest for those with some secondary education. As expected, women who are using a contraceptive method are more likely to be sexually active than those who are not.

The proportion of women who have been abstaining for less than two years declines at older ages and at longer marital durations. Women in rural areas and those who are not using any form of contraception, as well as those who use periodic abstinence as a method of family planning, are more likely to be postpartum abstaining. The proportion of women who have been abstaining for reasons other than child birth is higher among women age 35-49 years and among women who have been married for more than 20 years.

Table 5.6.1 Recent sexual activity: women

Percent distribution of women by sexual activity in the four weeks preceding the survey, and among those not sexually active, the length of time they have been abstaining and whether postpartum or not postpartum, according to selected background characteristics and contraceptive method currently used, Tanzania 1999

Background characteristic/ contraceptive method	Sexually active in past 4 weeks	Not sexually active in past four weeks				Never had sex	Missing	Total	Number of women
		Abstaining (postpartum)		Abstaining (not postpartum)					
		0-1 years	2+ years	0-1 years	2+ years				
Age									
15-19	28.8	8.6	0.6	13.9	0.6	47.4	0.1	100.0	909
20-24	64.9	13.2	1.9	13.4	0.2	6.2	0.2	100.0	811
25-29	68.1	15.0	1.8	13.1	0.4	1.1	0.5	100.0	749
30-34	68.6	13.3	0.7	13.9	2.1	0.8	0.5	100.0	490
35-39	70.8	8.6	0.5	13.8	5.3	0.3	0.7	100.0	456
40-44	72.1	5.2	0.4	14.1	7.6	0.0	0.6	100.0	299
45-49	68.6	2.0	0.9	18.1	10.1	0.0	0.3	100.0	315
Duration of union (years)									
Never married	19.4	6.8	0.5	19.0	1.4	52.5	0.3	100.0	943
0-4	69.5	16.2	3.4	10.7	0.0	0.0	0.1	100.0	713
5-9	72.0	14.6	1.0	11.2	0.5	0.0	0.7	100.0	684
10-14	75.3	11.3	0.2	10.6	2.1	0.0	0.5	100.0	551
15-19	69.6	12.5	0.7	14.0	3.2	0.0	0.0	100.0	395
20-24	73.1	6.5	0.1	14.0	5.3	0.0	1.0	100.0	307
25-29	76.5	2.4	1.0	14.2	6.0	0.0	0.0	100.0	275
30+	57.5	3.5	0.7	22.0	15.6	0.0	0.7	100.0	161
Residence									
Urban	60.3	7.9	0.4	16.2	3.5	11.5	0.2	100.0	1,122
Rural	58.9	11.5	1.4	13.1	2.1	12.6	0.4	100.0	2,907
Mainland/Zanzibar									
Mainland	59.6	10.5	1.1	14.0	2.4	12.0	0.4	100.0	3,929
Urban	60.8	7.9	0.4	16.3	3.4	11.0	0.2	100.0	1,088
Rural	59.2	11.5	1.4	13.1	2.0	12.4	0.4	100.0	2,841
Zanzibar	45.1	9.4	1.3	13.2	5.9	24.7	0.5	100.0	100
Pemba	41.4	10.1	1.9	13.4	6.7	26.1	0.4	100.0	44
Unguja	48.0	8.9	0.8	13.0	5.2	23.6	0.6	100.0	56
Education									
No education	64.0	11.0	1.6	11.9	4.6	6.2	0.6	100.0	1,093
Incomplete primary	53.3	7.9	0.8	12.4	1.8	23.5	0.3	100.0	854
Complete primary	61.2	11.3	1.0	14.4	1.5	10.4	0.2	100.0	1,866
Secondary+	42.3	12.1	0.3	27.0	2.7	14.8	0.8	100.0	215
Contraceptive method									
No method	53.9	12.5	1.3	13.3	2.8	15.8	0.4	100.0	3,131
Pill	89.0	0.8	1.1	9.2	0.0	0.0	0.0	100.0	186
IUD	66.1	0.0	0.0	33.4	0.5	0.0	0.0	100.0	19
Sterilisation	76.3	0.0	0.0	13.4	10.4	0.0	0.0	100.0	62
Periodic abstinence	65.2	16.2	0.7	15.0	3.0	0.0	0.0	100.0	89
Other	77.3	3.0	0.0	19.1	0.4	0.0	0.3	100.0	543
Total	59.3	10.5	1.1	14.0	2.5	12.3	0.4	100.0	4,029

Table 5.6.2 Recent sexual activity: men

Percent distribution of men by sexual activity in the four weeks preceding the survey, according to selected background characteristics, Tanzania 1999

Background characteristic	Sexually active in past 4 weeks	Not sexually active in past 4 weeks	Never had sex	Total	Number of men
Age					
15-19	28.4	28.2	43.4	100.0	790
20-24	57.4	32.2	10.5	100.0	540
25-29	76.7	22.0	1.3	100.0	546
30-34	80.9	18.6	0.5	100.0	371
35-39	78.3	21.1	0.6	100.0	445
40-44	80.4	18.5	1.0	100.0	219
45-49	81.4	18.5	0.1	100.0	259
50-54	82.0	17.5	0.5	100.0	201
55-59	77.9	22.1	0.0	100.0	171
Marital status					
Never married	34.5	33.4	32.2	100.0	1,289
In union	84.1	15.9	0.0	100.0	2,063
Formerly married	56.2	43.8	0.0	100.0	190
Residence					
Urban	61.8	29.1	9.1	100.0	941
Rural	65.5	21.8	12.7	100.0	2,601
Mainland/Zanzibar					
Mainland	65.0	23.8	11.2	100.0	3,452
Urban	62.4	29.3	8.3	100.0	909
Rural	66.0	21.8	12.2	100.0	2,543
Zanzibar	46.8	22.3	30.9	100.0	90
Pemba	46.4	21.4	32.2	100.0	36
Unguja	47.1	22.9	30.1	100.0	55
Education					
No education	65.2	22.4	12.4	100.0	495
Incomplete primary	58.0	23.0	18.9	100.0	1,000
Complete primary	68.5	23.8	7.7	100.0	1,791
Secondary+	61.0	28.8	10.2	100.0	256
Total	64.6	23.7	11.7	100.0	3,542

Two-thirds of the men interviewed were sexually active in the four weeks before the survey. About one-quarter of the men interviewed had had sex, but not in the preceding four weeks, and 12 percent had never had sex. Sexual activity increases with age up to the late 20s and then remains remarkably constant. Men in union are much more likely to be sexually active (84 percent) than those who were formerly married (56 percent) or who have never been married (35 percent). As with women, men in Zanzibar are less likely than men in the Mainland to have had sex in the four weeks before the survey.

5.5 POSTPARTUM AMENORRHOEA, ABSTINENCE, AND INSUSCEPTIBILITY

For women who are not using contraceptives, exposure to the risk of pregnancy in the period after birth is influenced by two factors, namely, breastfeeding and sexual abstinence. Breastfeeding can prolong the postpartum protection from conception through its effect on the duration of amenorrhoea (the period after a birth prior to return of menses). Protection can also be prolonged by delaying the resumption of sexual relations. Women who are insusceptible are those who are not exposed to the risk of pregnancy either because they are amenorrhoeic or are still abstaining after a birth. Table 5.7 presents information on the percentage of women who gave birth in the three years prior to the survey and who are still amenorrhoeic, abstaining, and insusceptible. The data are grouped in intervals of two months to minimise fluctuations in the estimates.

Table 5.7 Postpartum amenorrhoea, abstinence, and insusceptibility

Percentage of births in the three years preceding the survey for which mothers are postpartum amenorrhoeic, abstaining and insusceptible, by number of months since birth, and median and mean durations, Tanzania 1999

Months since birth	Amenor-rhoeic	Abstaining	Insus-ceptible	Number of births
<2	97.0	93.5	100.0	102
2-3	75.4	68.0	92.5	130
4-5	78.7	45.3	85.2	111
6-7	62.8	32.6	70.5	118
8-9	61.8	33.4	69.8	111
10-11	54.1	21.3	65.8	112
12-13	51.9	14.3	58.8	83
14-15	41.1	24.9	52.9	141
16-17	28.1	18.2	41.3	115
18-19	30.5	19.6	39.5	107
20-21	17.5	13.5	26.5	99
22-23	12.3	3.6	14.8	105
24-25	6.3	9.7	14.3	99
26-27	5.3	9.4	10.5	121
28-29	6.4	2.1	8.4	107
30-31	1.8	5.6	7.4	125
32-33	5.5	0.9	6.4	126
34-35	2.7	3.6	6.2	88
Total	35.7	23.7	43.2	2,001
Median	12.0	4.4	14.7	-
Mean	13.0	8.7	15.7	-
Prevalence/incidence mean[1]	12.7	8.4	15.3	-

[1] The prevalence-incidence mean is defined as the number of children whose mothers are amenorrhoeic (prevalence) divided by the average number of births per month (incidence).

Within the first two months of delivery, all women are insusceptible to the risk of pregnancy. By 4-5 months after birth, 79 percent of the women remain amenorrhoeic, and 85 percent are still insusceptible, but only 45 percent are abstaining from sexual relations. At 18-19 months postpartum, 31 percent remain amenorrhoeic, 20 percent are still abstaining, and 40 percent are insusceptible to pregnancy. The results show that the median duration of insusceptibility (either due to amenorrhoea or abstinence) for Tanzanian women is 15 months. The proportion of women experiencing postpartum insusceptibility falls from 100 percent in the period less than two months after birth to 66 percent at 10-11 months and to 15 percent among women who had a birth 22-23 months before the survey.

Table 5.8 shows the median duration of postpartum amenorrhoea, abstinence and insusceptibility by background characteristics for women who gave birth in the three years prior to the survey. Women age 30 years and older have a longer period of insusceptibility (18 months) than younger ones (14 months) due to longer periods of amenorrhoea. The period of amenorrhoea is considerably higher among rural women (13 months) than among their counterparts in urban areas (4 months). Differences between women in the Mainland and in Zanzibar are minimal.

Postpartum amenorrhoea is inversely related to mother's education, decreasing from 14 months for women with no education to 11 months for women with secondary education and above. The median duration of insusceptibility for women with no education is 19 months, compared with 12 months for those with secondary education and above.

Table 5.8 Median duration of postpartum insusceptibility by background characteristics

Median number of months of postpartum amenorrhoea, postpartum abstinence, and postpartum insusceptibility, by selected background characteristics, Tanzania 1999

Background characteristic	Median duration of postpartum: Amenorrhoea	Abstinence	Insusceptibility	Number of births
Age				
<30	10.7	4.9	13.9	1,330
30+	14.0	3.8	17.9	671
Residence				
Urban	3.8	6.1	8.7	384
Rural	13.2	4.2	15.0	1,617
Mainland/Zanzibar				
Mainland	12.1	4.5	14.8	1,951
Urban	3.7	6.2	8.8	371
Rural	13.2	4.2	15.1	1,580
Zanzibar	11.2	3.6	11.5	50
Pemba	11.9	3.5	12.2	24
Unguja	9.3	3.7	10.7	26
Education				
No education	14.2	4.3	19.0	533
Incomplete primary	8.8	5.2	11.1	344
Complete primary	12.6	4.2	14.8	1,042
Secondary+	10.6	7.8	11.7	83
Total	12.0	4.4	14.7	2,001

Note: Medians are based on current status.

5.6 TERMINATION OF EXPOSURE TO PREGNANCY

The onset of infertility with increasing age reduces the proportion of women who are exposed to the risk of pregnancy. One indication of this reduced risk is the proportion of women who are menopausal. Table 5.9 presents data on menopause.

In this report, women are considered menopausal if they are neither pregnant nor postpartum amenorrhoeic, but have not had a menstrual period in the six months preceding the survey. As expected, the proportion of women who are menopausal increases with age from less than 3 percent for women age 30-34 years to 43 percent for women age 48-49 years.

Table 5.9 Menopause

Indicators of menopause among women age 30-49, by age, Tanzania 1999

Age	Menopause[1] Percent	Number
30-34	2.4	490
35-39	3.9	456
40-41	5.7	171
42-43	14.5	97
44-45	30.5	108
46-47	15.7	118
48-49	43.2	120
Total	10.1	1,560

[1] Percentage of all women who are not pregnant, not postpartum amenorrhoeic and whose last menstrual period occurred six or more months preceding the survey.

FERTILITY PREFERENCES 6

Several questions dealing with fertility preferences were included in the 1999 TRCHS questionnaire. All women who were not pregnant or were unsure of their status at the time of the survey were asked whether they would like to have a (another) child and, if so, how long they would prefer to wait before the next child. Pregnant women were asked whether they would like to have another child after the one they were expecting and, if so, when. Women were also asked the number of children they would like to have if they could start afresh.

It is assumed that individuals will strive to achieve their preferred family size if family planning services are available, accessible, and affordable. However, this is not always the case when there are pressures from other people, particularly from spouses whose fertility preferences may be different from those of the respondent.

6.1 REPRODUCTIVE PREFERENCES

Table 6.1 presents data concerning future reproductive preferences among women according to the number of living children. Although 60 percent of all women say that they want more children, 31 percent say they want to wait for two or more years before having their next child. These women can be considered as potential contraceptive users for the purpose of spacing (Figure 6.1).

Twenty-four percent of women say they want another child soon, while 5 percent want another child but are undecided on the timing of the next birth. Eleven percent are unsure of whether they want another child. One in four women either wants no more children or has already been sterilised. Four percent of women consider themselves to be infecund.

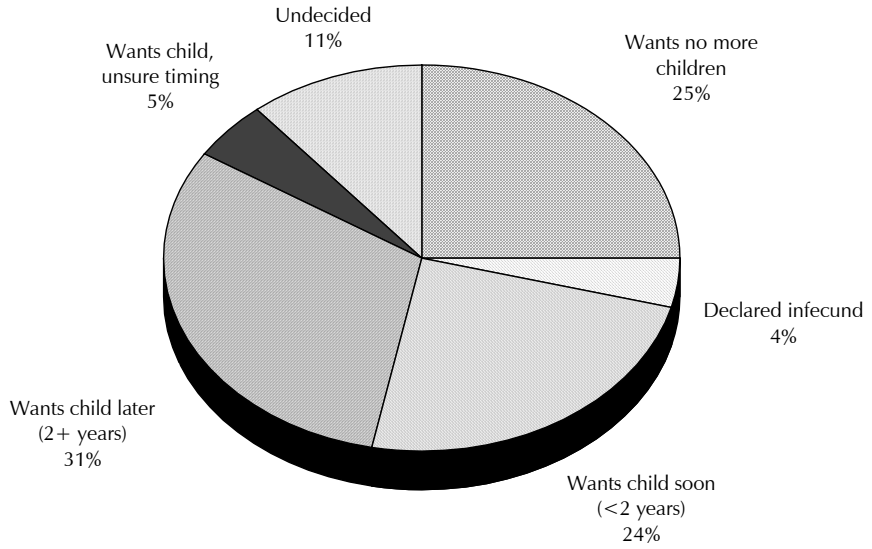
Table 6.1 Fertility preferences by number of living children

Percent distribution of all women by desire for more children, according to number of living children, Tanzania 1999

Desire for children	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
Have another soon[2]	29.2	34.8	27.1	20.0	14.0	14.3	7.6	23.6
Have another later[3]	12.6	51.3	48.4	45.0	26.5	20.6	14.3	31.1
Have another, undecided when	16.8	2.6	0.9	1.2	1.0	0.1	0.2	5.1
Undecided	32.3	1.8	3.7	4.1	6.6	4.6	3.0	10.8
Want no more	5.3	5.9	16.2	23.1	47.0	54.4	60.6	23.7
Sterilised	0.0	1.2	1.1	2.5	1.6	1.3	4.9	1.5
Declared infecund	2.6	2.3	2.7	4.2	3.4	4.7	9.5	3.9
Missing	1.2	0.2	0.1	0.0	0.0	0.0	0.0	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,015	749	616	453	385	295	515	4,029

[1] Includes current pregnancy
[2] Want next birth within two years
[3] Want to delay next birth for two or more years

Figure 6.1 Fertility Preferences of Women Age 15-49



Note: "Want no more" includes sterilised women.

TRCHS 1999

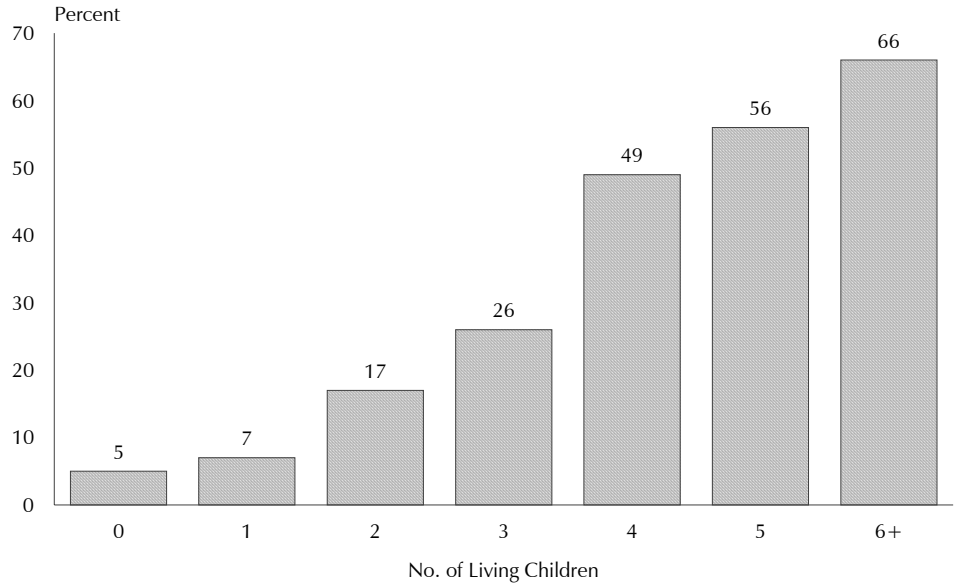
As expected, the proportion of women who want no more children or are already sterilised increases with increasing number of living children, from 5 percent of childless women to 66 percent of those with six or more children (Figure 6.2). Conversely, the desire to have a child soon declines as the number of living children rises. For instance, 35 percent of women with one child want to have another child soon, compared with only 8 percent among those with six or more children. The proportion of women who want another child later increases from 13 percent for childless women to 51 percent for those with one child. Thereafter, the desire to space children decreases as the number of living children increases.

The percent distribution of women by reproductive preferences according to age is shown in Table 6.2. The desire to have another child soon is lower among the youngest and oldest women and relatively constant in between. The proportion of women who want no more children or are sterilised increases with increasing age, from 7 percent among women age 15-19 to 59 percent among those age 40-44 years. The proportion of women who declare themselves infecund increases from less than two percent among women age 15-34 years to 26 percent among those age 45-49.

The desire to stop childbearing differs according to women's circumstances. Table 6.3 shows the percentage of women who want no more children, according to the number of living children they already have and selected background characteristics.

The desire to have no more children is greater among urban than among rural women, regardless of the number of children they already have. Similarly, the proportion of women who want no more children is substantially higher in the Mainland than in Zanzibar. For example, among women with 5 children, 57 percent of those in the Mainland want no more children,

Figure 6.2 Desire to Stop Childbearing among Women Age 15-49, by Number of Living Children



TRCHS 1999

Table 6.2 Fertility preferences by age

Percent distribution of all women by desire for more children, according to age, Tanzania 1999

Desire for children	Age of woman							Total
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Have another soon[1]	16.7	23.4	30.9	24.6	31.5	23.3	13.8	23.6
Have another later[2]	27.3	54.5	42.5	30.8	13.6	5.5	4.5	31.1
Have another, undecided when	15.7	4.5	1.2	1.9	0.8	0.5	0.5	5.1
Undecided	31.2	6.8	5.8	4.3	4.3	2.2	2.1	10.8
Want no more	6.9	10.1	18.0	34.3	44.3	52.8	47.2	23.7
Sterilised	0.0	0.1	1.0	1.7	2.0	5.9	6.0	1.5
Declared infecund	1.9	0.4	0.4	1.0	3.5	9.8	26.0	3.9
Missing	0.3	0.3	0.2	1.4	0.0	0.0	0.0	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	909	811	749	490	456	299	315	4,029

[1] Want next birth within two years
[2] Want to delay next birth for two or more years

compared with only 22 percent of women in Zanzibar. Overall, there is an inverse relationship between the proportion of women who want no more children and women's level of education. However, the relationship becomes less clear when the number of children is taken into account.

Table 6.3 Desire to stop childbearing by background characteristics

Percentage of all women who want no more children, by number of living children and selected background characteristics, Tanzania 1999

Background characteristic	Number of living children[1]							All women
	0	1	2	3	4	5	6+	
Residence								
Urban	4.0	8.8	17.5	43.2	64.8	68.7	74.1	23.8
Rural	5.8	6.0	17.1	17.9	43.0	53.5	64.3	25.8
Mainland/Zanzibar								
Mainland	5.4	7.1	17.3	25.7	49.3	56.7	66.1	25.4
Urban	4.1	8.8	17.8	43.8	66.1	(71.0)	75.2	24.0
Rural	6.0	6.0	17.2	17.9	43.6	54.3	65.0	26.0
Zanzibar	1.1	4.6	11.8	18.1	18.1	21.8	49.0	17.5
Pemba	1.3	(3.9)	(13.8)	(20.4)	(7.3)	(12.9)	42.7	16.6
Unguja	1.0	5.0	10.9	16.4	25.0	(29.0)	57.1	18.3
Education								
No education	5.3	6.8	15.1	20.0	47.2	49.8	61.8	31.5
Primary incomplete	7.9	9.4	12.7	21.5	54.6	56.8	70.4	25.6
Primary complete	2.9	5.0	18.8	29.0	49.0	59.1	69.4	22.0
Secondary+	7.9	18.5	23.5	(38.1)	(30.4)	(74.3)	(63.5)	20.8
Total women	5.3	7.0	17.2	25.6	48.5	55.7	65.4	25.2

Note: Figures in parentheses are based on 25-49 cases.
[1] Includes current pregnancy

6.2 NEED FOR FAMILY PLANNING SERVICES

Women who indicate that they either want no more children or want to wait for two or more years before having another child but are not using contraception are considered to have an unmet need for family planning. Pregnant women are considered to have unmet need for spacing or limiting if their pregnancy was mistimed or unwanted, respectively. Amenorrhoeic women are also considered to have unmet need if their last birth was mistimed or unwanted. Women with unmet need and those who are currently using contraception (met need) constitute the total demand for family planning.

Table 6.4 shows the percent distribution of women with unmet need, with met need, and the total demand for family planning by selected background characteristics. Data are presented for all women, regardless of marital status, though summary lines are also presented for currently married and unmarried women.

The total demand for family planning among all women is 40 percent, and 56 percent of the demand is satisfied. The demand for spacing purposes is higher (25 percent) than the demand for limiting purposes (14 percent). Overall, 17 percent of women have an unmet need for family planning, of which 12 percent is for spacing and 6 percent is for limiting births. As expected, unmet need for family planning is much higher among currently married women (22 percent) and much lower among unmarried women (8 percent) than among all women (17 percent).

Table 6.4 Need for family planning

Percentage of all women with unmet need for family planning, and with met need for family planning, and the total demand for family planning, by selected background characteristics, Tanzania 1999

Background characteristic	Unmet need for family planning[1]			Met need for family planning (currently using)[2]			Total demand for family planning			Percentage of demand satisfied	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total		
Age											
15-19	9.4	1.3	10.7	7.2	0.5	7.7	16.6	1.8	18.4	42.0	909
20-24	17.4	1.9	19.3	26.3	3.1	29.4	43.7	5.0	48.7	60.4	811
25-29	17.0	4.4	21.4	19.3	6.7	26.0	36.3	11.1	47.4	54.9	749
30-34	12.0	8.4	20.4	16.2	11.4	27.5	28.2	19.7	47.9	57.5	490
35-39	5.4	13.8	19.2	11.0	16.5	27.5	16.4	30.3	46.7	58.8	456
40-44	3.2	8.9	12.1	2.4	26.3	28.7	5.6	35.2	40.8	70.4	299
45-49	4.7	13.4	18.1	0.7	14.7	15.4	5.4	28.1	33.5	46.0	315
Residence											
Urban	9.5	4.2	13.7	22.3	10.7	33.0	31.8	14.9	46.7	70.6	1,122
Rural	12.2	6.4	18.6	10.7	7.4	18.2	23.0	13.8	36.8	49.4	2,907
Mainland/Zanzibar											
Mainland	11.3	5.8	17.1	14.0	8.5	22.5	25.4	14.3	39.7	56.8	3,929
Urban	9.4	4.2	13.6	22.5	10.9	33.4	31.9	15.1	47.0	71.0	1,088
Rural	12.1	6.4	18.5	10.8	7.6	18.3	22.9	14.0	36.8	49.8	2,841
Zanzibar	16.6	4.3	20.9	10.6	3.0	13.6	27.2	7.3	34.6	39.4	100
Pemba	19.3	3.9	23.2	4.3	2.6	6.8	23.6	6.5	30.1	22.8	44
Unguja	14.5	4.7	19.2	15.6	3.3	18.9	30.1	8.0	38.1	49.6	56
Education											
No education	10.3	8.1	18.4	6.9	7.1	14.0	17.2	15.2	32.4	43.2	1,093
Primary incomplete	6.9	5.9	12.8	9.7	8.1	17.8	16.6	14.0	30.7	58.2	854
Primary complete	14.5	4.9	19.3	18.2	8.6	26.8	32.7	13.5	46.2	58.1	1,866
Secondary+	9.4	1.2	10.6	29.8	12.9	42.8	39.2	14.1	53.3	80.2	215
All women	11.5	5.8	17.2	14.0	8.3	22.3	25.4	14.1	39.5	56.4	4,029
Currently married women	13.8	8.0	21.8	15.1	10.3	25.4	28.9	18.3	47.2	53.7	2,653
Unmarried women	7.0	1.4	8.4	11.8	4.6	16.4	18.8	6.0	24.8	66.1	1,376

[1] Unmet need for *spacing* includes pregnant women whose pregnancy was mistimed, amenorrhoeic women whose last birth was mistimed, and women who are neither pregnant nor amenorrhoeic and who are not using any method of family planning but say they want to wait two or more years for their next birth. Also included in unmet need for spacing are women who are unsure whether they want another child or who want another child but are unsure when to have the birth. Unmet need for *limiting* refers to pregnant women whose pregnancy was unwanted, amenorrhoeic women whose last child was unwanted, and women who are neither pregnant nor amenorrhoeic and who are not using any method of family planning but want no more children. Excluded from the unmet need category are menopausal or infecund women and unmarried women who have not had sexual intercourse in the four weeks prior to the interview.

[2] Using for *spacing* is defined as women who are using some method of family planning and say they want to have another child or are undecided whether to have another. Using for *limiting* is defined as women who are using and who want no more children.

Note that the specific methods used are not taken into account here.

Unmet need for family planning is lowest among women age 15-19 years, probably due to lower levels of sexual activity and greater desires to have children. Unmet need for family planning is greater among rural than among urban women. Unmet need—especially for spacing children—is higher among Zanzibari women than women in the Mainland.

The relationship between unmet need and women's level of education is unclear. However, there is a positive relationship between total demand for family planning and level of education. The total demand for family planning increases from 32 percent for women with no education to 53 percent for those with secondary education or higher. Similarly, the percentage of demand satisfied increases with increasing level of education from 43 percent among those with no formal education to 80 percent among those with secondary education or higher.

There has been a decline in the level of unmet need over time, from 30 percent among currently married women in 1991-92, to 24 percent in 1996, to 22 percent in 1999.

6.3 IDEAL NUMBER OF CHILDREN

In the 1999 TRCHS, women and men were asked what they consider to be the ideal family size. This information was obtained by asking the respondents two questions. Respondents who had no children were asked, "If you could choose exactly the number of children to have in your whole life, how many would that be?" For respondents who had children, the question was, "If you could go back to the time when you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be?" The distribution of respondents by ideal number of children is presented in Table 6.5. It should be noted that respondents were not forced to give an exact number of children and 3 percent of women and 4 percent of men gave non-numeric responses to the question on ideal family size (e.g., "as many as God wishes", "any number is okay").

The data show a general desire for large families in Tanzania. More than half of women and men report that five or more children are ideal and another one-quarter cite four children as ideal. Only 6 percent of women and 5 percent of men say that two children are ideal, which is the level of fertility required for long-term population growth stabilisation.

There is a positive correlation between the actual and ideal number of children for both men and women. For instance, the mean ideal number of children increases from 4.5 among childless women to 7.3 among women with 6 or more living children. The corresponding increase for men is from 4.6 children among men with no children to 9.0 among those with 6 or more. This relationship is most likely due to the reluctance of respondents who have more children to admit that they might have wanted fewer. Also, those who wanted more children are more likely to have them. However, it is also likely that there has been a gradual decline in family size preferences over time.

This latter explanation is borne out by a comparison of data from previous surveys (Figure 6.3). The mean ideal family size among women has declined from 6.1 in 1991-92 to 5.5 in 1996 and to 5.3 in 1999. Among men, the decline has been from 6.5 in 1991-92 to 5.9 in 1996 to 5.6 in 1999. In all surveys, the mean ideal number of children among men is consistently higher than among women.

Table 6.6 shows the mean ideal number of children by age of woman and selected background characteristics. The mean ideal number of children increases with increasing age, from 4.6 children among women age 15-19 years to 7.3 children among those age 45-49 years. The trend is similar for men.

On average, rural women want one more child than urban women (5.6 versus 4.3). This preference for more children among rural women is true for all age groups. Similarly, the mean ideal number of children among men is higher in rural areas than in urban areas.

Table 6.5 Ideal number of children

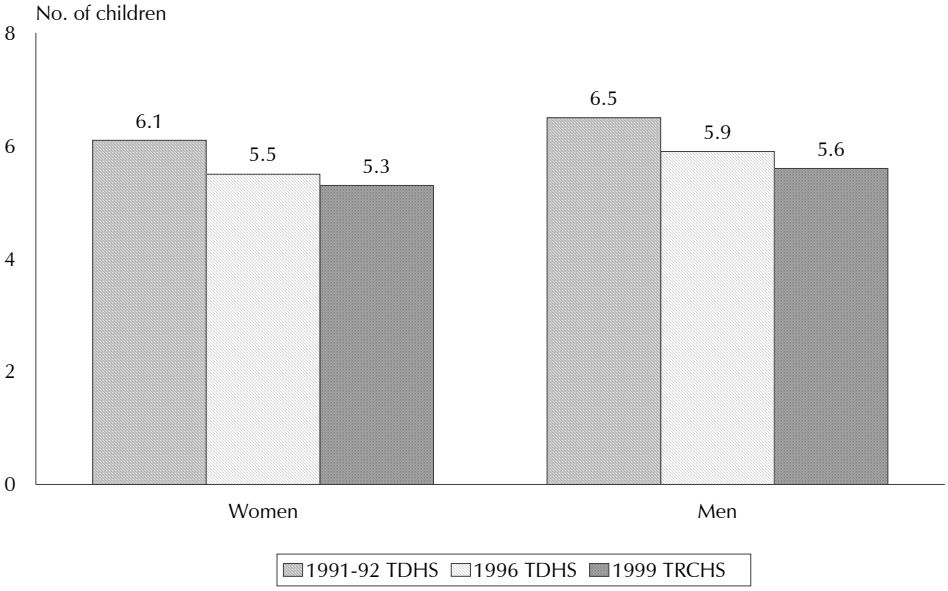
Percent distribution of all respondents by ideal number of children and mean ideal number of children for all respondents and currently married respondents, according to number of living children, Tanzania 1999

Ideal number of children	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
WOMEN								
0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
1	0.7	0.6	0.0	0.0	0.8	0.0	0.0	0.4
2	11.6	9.1	3.6	1.6	2.4	4.0	1.2	6.0
3	18.6	20.4	11.3	6.9	3.0	1.9	2.4	11.7
4	27.3	30.9	37.0	32.0	27.3	14.6	13.7	27.3
5	16.1	18.1	19.6	20.0	18.1	22.6	12.5	17.7
6+	20.7	19.3	27.1	38.0	45.6	54.2	67.1	34.1
Non-numeric response	4.9	1.6	1.4	1.5	2.8	2.7	3.2	2.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,015	749	616	453	385	295	515	4,029
Mean[2] ideal number for:								
All women	4.5	4.5	4.9	5.4	5.8	6.2	7.3	5.3
Number of women	965	737	608	446	375	287	499	3,916
Currently married women	5.4	4.8	4.9	5.5	5.8	6.3	7.3	5.7
Number of women	203	491	498	378	321	265	435	2,592
MEN								
0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1
1	0.6	0.5	0.0	0.0	0.0	0.0	0.2	0.3
2	9.0	5.4	3.2	2.0	2.8	0.0	1.3	5.3
3	20.7	21.6	16.2	8.0	4.1	5.4	2.3	14.4
4	26.7	30.4	35.4	29.8	28.2	11.4	14.8	25.6
5	15.7	18.3	16.9	22.9	15.4	22.4	5.1	15.4
6+	22.6	22.0	25.2	35.6	45.2	59.1	71.1	35.2
Non-numeric response	4.5	1.8	3.1	1.9	4.2	1.7	5.2	3.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	1,482	395	369	314	213	194	574	3,542
Mean[2] ideal number for:								
All men	4.6	4.7	4.9	5.4	5.8	6.7	9.0	5.6
Number of men	1,415	388	358	308	204	191	544	3,409
Currently married men	4.8	4.8	5.0	5.3	5.8	6.7	9.0	6.3
Number of men	172	307	323	288	194	184	529	1,998

[1] Includes current pregnancy
[2] Means are calculated excluding the respondents who gave non-numeric responses.

The mean ideal number of children among women and men in Zanzibar (6.8 children for women and 8.1 children for men) is higher than for respondents in the Mainland (5.2 children for women and 5.5 children for men). The high ideal number of children in Zanzibar can be attributed almost entirely to the large families desired by women and men in Pemba. For instance, the mean ideal number of children desired by women in Pemba is 8.1, compared with 5.8 in Unguja. Similarly, the mean ideal number of children desired by men in Pemba is 10.8 children, compared with 6.3 in

Figure 6.3 Trends in Mean Ideal Family Size Among Women and Men, 1991-1999



Unguja.

Table 6.6 Mean ideal number of children

Mean ideal number of children for all women and all men by age and selected background characteristics, Tanzania 1999

Background characteristic	Age of woman							Total women	Total men
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	15-49	15-59
Residence									
Urban	3.8	3.7	4.1	4.6	4.7	5.4	6.3	4.3	4.3
Rural	4.9	4.9	5.4	5.9	6.2	6.8	7.6	5.6	6.1
Mainland/Zanzibar									
Mainland	4.6	4.4	5.0	5.5	5.7	6.5	7.3	5.2	5.5
Urban	3.8	3.6	4.1	4.6	4.6	5.4	6.3	4.3	4.3
Rural	4.9	4.8	5.4	5.8	6.1	6.8	7.6	5.6	6.0
Zanzibar	6.1	6.2	6.4	7.3	8.0	7.5	7.7	6.8	8.1
Pemba	7.4	7.4	7.4	8.9	8.8	(9.1)	*	8.1	10.8
Unguja	4.9	5.5	5.8	5.9	7.3	(6.3)	(6.6)	5.8	6.3
Education									
No education	5.8	6.1	5.8	6.5	6.4	7.1	8.0	6.6	8.0
Primary incomplete	4.5	4.8	5.4	5.5	6.5	6.7	6.4	5.3	6.0
Primary complete	4.2	4.0	4.8	5.3	5.0	5.4	(5.5)	4.6	4.9
Secondary+	3.8	3.7	4.4	4.2	4.6	(3.7)	4.4	4.0	4.2
Total women	4.6	4.5	5.0	5.5	5.8	6.5	7.3	5.3	NA
Total men	4.8	4.3	5.1	5.1	6.1	6.7	7.6	NA	5.6

Note: Figures in parentheses are based on 25-49 cases; an asterisk indicates that a figure is based on fewer than 25 cases and has been suppressed.
NA = Not applicable

Irrespective of age, the mean ideal number of children desired by women and men with some

secondary education is considerably lower than that desired by women and men with no formal education.

6.4 FERTILITY PLANNING

In the 1999 TRCHS, for each child born in the preceding five years and any current pregnancy, women were asked whether the pregnancy was planned (wanted then), wanted but at a later time (mistimed), or unwanted (wanted no more children). The answers to these questions help to show the degree to which couples are able to control fertility. The validity of the answers depends on the extent to which the respondents were able to accurately recall their pregnancies in the last five years and their wishes with respect to each pregnancy, and how honest they were in reporting their wishes. This measure has a limitation in that mistimed or unwanted pregnancies may turn out to be wanted children after birth. As such, the results presented here are likely to be underestimates of the proportion of births that were unwanted at the time of conception.

Table 6.7 shows the percent distribution of births (including current pregnancy) in the five years preceding the survey by fertility planning status, according to birth order and mother's age at birth. The data show that 78 percent of births in the past five years were wanted at the time of conception, while 11 percent were wanted later and 11 percent were not wanted at the time they were conceived. The percentage of births that were mistimed or unwanted increases from 15 percent of first births to 28 percent of fourth or higher order births. The proportion of unwanted births is much higher among women age 30-49 years than among younger women.

Table 6.7 Fertility planning status

Percent distribution of births (including current pregnancies) in the five years preceding the survey by fertility planning status, according to birth order and mother's age at birth, Tanzania 1999

Birth order and mother's age at birth	Planning status of pregnancy				Total	Number of births[1]
	Wanted then	Wanted later	Not wanted	Missing		
Birth order						
1	85.1	4.0	10.6	0.3	100.0	845
2	80.1	13.2	6.7	0.0	100.0	681
3	78.0	13.8	7.9	0.4	100.0	553
4+	72.2	13.7	14.1	0.0	100.0	1,581
Age at birth						
<19	80.9	7.3	11.7	0.1	100.0	624
20-24	81.5	10.2	8.0	0.4	100.0	1,182
25-29	75.9	17.7	6.3	0.0	100.0	806
30-34	73.2	13.2	13.5	0.1	100.0	586
35-39	73.0	8.6	18.4	0.0	100.0	291
40-49	67.3	3.3	29.4	0.0	100.0	172
Total	77.5	11.4	11.0	0.2	100.0	3,660

[1] Includes current pregnancies

The potential demographic impact of avoiding unwanted births can be estimated by

calculating the "total wanted fertility rate." The total wanted fertility rate is calculated in the same manner as the total fertility rate, but unwanted births are excluded from the numerator. In this context, unwanted births are defined as births that exceed the number considered ideal by the respondent. Therefore, wanted fertility represents the level of fertility that would have prevailed during the three years preceding the survey if all unwanted births were prevented. A comparison between actual rates and wanted rates indicates the potential demographic impact of the elimination of unwanted births.

Table 6.8 presents the wanted and actual fertility rates according to selected background characteristics. Overall, the total wanted fertility rate is 14 percent lower than the actual fertility. Thus, if all unwanted births were to be eliminated, the total fertility rate of Tanzania would be 4.8 children per woman. The difference between the wanted and actual fertility rate is 1 child in rural areas and 0.3 in urban areas.

Although the gap between wanted fertility and actual fertility is higher in the Mainland than in Zanzibar (0.8 versus 0.5), the wanted fertility rate in Zanzibar is higher than that of the Mainland (5.1 versus 4.8). With respect to education, the gap between wanted and actual fertility is smaller among women who have completed primary school than among those with no education. This differential implies that women with an education are better able to realise their desired fertility.

Table 6.8 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the three years preceding the survey, by selected background characteristics, Tanzania 1999

Background characteristic	Total wanted fertility rate	Total fertility rate
Residence		
Urban	2.9	3.2
Rural	5.5	6.5
Mainland/Zanzibar		
Mainland	4.8	5.6
Urban	2.9	3.1
Rural	5.5	6.5
Zanzibar	5.1	5.6
Education		
No education	5.6	6.5
Primary incomplete	4.4	5.1
Primary complete+	4.3	4.9
Total	4.8	5.6

Note: Rates are based on births to women 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 3.2.

INFANT AND CHILD MORTALITY 7

This chapter presents levels, trends, and differentials in mortality among children under five years of age in Tanzania. Specifically it includes details on neonatal, postneonatal, infant, and child mortality. Additional information is provided on high-risk fertility behaviour among Tanzanian women. Rates of infant and child mortality reflect a country's level of socioeconomic development and quality of life. The analysis provides an opportunity to assess programmes aimed at the reduction of infant and child mortality in Tanzania. The information is essential for planning and updating current polices.

7.1 DEFINITIONS, METHODOLOGY, AND ASSESSMENT OF DATA QUALITY

Estimates of childhood mortality are based on information from the birth history section of the questionnaire administered to individual women. The section began with questions about the aggregate childbearing experience of respondents (i.e., the number of sons and daughters who live with the mother, the number who live elsewhere, and the number who have died). For each of these births, information was then collected on the sex, the month and year of birth, survivorship status and current age, or, if the child had died, the age at death.

This information is used to directly estimate mortality rates. In this report, mortality in early childhood is measured using the following five rates:

Neonatal mortality: the probability of dying within the first month of life;

Postneonatal mortality: the difference between infant and neonatal mortality;

Infant mortality: the probability of dying before the first birthday;

Child mortality: the probability of dying between the first and fifth birthday;

Under-five mortality: the probability of dying between birth and fifth birthday.

All rates are expressed per 1,000 live births, except for child mortality, which is expressed per 1,000 children surviving to 12 months of age.

In developing countries like Tanzania, population censuses and demographic surveys are the major sources of mortality data. Vital registration is another source of mortality data in Tanzania, but unfortunately, the information is not widely used because it is incomplete and disproportionately represents the urban population. Also, mortality information from the Health Management Information System (HMIS) does not reflect the mortality picture from a population perspective, because it is facility-based data and thus does not include deaths that occur outside of facilities. The Adult Morbidity and Mortality Project (AMMP) in Tanzania reported that 60 percent of child deaths in Dar es Salaam took place in a hospital; however, in Morogoro, only 20 percent of children died in a hospital. In this case, birth history information from surveys gives the most robust estimates of infant and child mortality. Estimates of mortality from the censuses employed indirect techniques that adjust reported data for expected errors, while estimates from the series of TDHS surveys are based on data as reported directly, with no adjustments. Results from direct estimates are viewed

with a certain degree of uncertainty since they can underestimate mortality rates. Women tend to omit the deaths of babies who died shortly after birth or deaths that occured early in infancy. The incidence of omission or misstatement of date of birth and age at death is likely to be greater among older women, who may have more difficulty remembering events. Examination of data relating to child mortality does not indicate that there are any serious biases in reporting (Appendix Tables C.5 and C.6).

7.2 CHILDHOOD MORTALITY LEVELS AND TRENDS

Neonatal, postneonatal, infant, child, and under-five mortality rates by five-year periods preceding the survey are shown in Table 7.1. Levels shown reflect up to 15 years before the survey. Analysing the most recent five-year period (0-4 years preceding the survey or mid-1994 to mid-1999), under-five mortality is estimated at 147 per 1,000 live births, and infant mortality is 99 per 1000 live births. These figures indicate that one in seven children born in Tanzania dies before reaching the fifth birthday. The pattern shows that 28 percent of deaths under five occur during the neonatal period, while 40 percent occur during the postneonatal period and 36 percent of deaths occur at ages 1-4 years.

Table 7.1 Infant and child mortality

Infant and child mortality rates by five-year periods preceding the survey, Tanzania 1999

Years preceding survey	Neonatal mortality (NN)	Postneonatal mortality (PNN)	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-five mortality ($_5q_0$)
0-4	40.4	58.7	99.1	52.7	146.6
5-9	50.6	67.0	117.6	68.5	178.0
10-14	31.4	78.9	110.2	67.8	170.5

There are two ways to measure trends in mortality, each giving a different indication of the direction of change. Data from the 1999 TRCHS birth histories were used to construct mortality rates for successive time periods prior to the survey. As shown in Table 7.1, this method implies that under-five mortality has declined substantially from 178 deaths per 1,000 births in the period 5-9 years before the survey (approximately 1990-94) to 147 for the period 0-4 years before the survey. Because this method relies on mothers' memories of events that may have taken place some years ago, the data are potentially subject to various distortions due to misreporting of events and/or their timing.

The second method of measuring trends in mortality is to compare data from two successive surveys. A comparison of data from the 1999 TRCHS and the 1996 TDHS indicates that childhood mortality has increased, from 137 per 1,000 births to 147 for the under-five mortality rate. Infant mortality has increased by from 88 to 99 per 1,000 births (BOS and MI, 1997: 98).

A recent study took a closer look at all the data on mortality levels from the 1999 TRCHS as well as from the 1991-92 and 1996 TDHS surveys (MEASURE *DHS+* and MEASURE *Evaluation*, unpublished presentation). The trend analysis focused on the comparison of four-year rates in urban and rural Mainland Tanzania and on the possible role of the AIDS epidemic. It was concluded that there is a need to be very cautious in interpreting mortality trends because sampling errors associated with measures of childhood mortality are large. The problem of sampling errors is largest in the urban areas, where sample sizes are smaller. In urban Mainland Tanzania, child mortality levels appear to have increased after 1996, especially in the neonatal period. However, it cannot

be excluded that the urban estimate for 1996 underestimated child mortality and exaggerated the decline during the early 1990s. It still appears that urban mortality has increased somewhat—compared with the estimates for 1987-91 from the TDHS 1991—and part of this increase is likely due to HIV/AIDS. Overall, Tanzanian mortality levels and trends are largely determined by what happens in the rural areas, where the majority of the population lives. There is some evidence of a modest increase or levelling off in the rural Mainland after 1996. In Zanzibar, child mortality levels are lower than in Mainland Tanzania. There is no evidence of any further decline during the nineties.

7.3 CHILDHOOD MORTALITY DIFFERENTIALS

Table 7.2 presents mortality differentials by selected background characteristics, such as place of residence and level of education of mothers. A ten-year period (1990–99) is used to calculate the mortality estimates in order to have a sufficient number of cases in each category, except for size at birth, for which a five-year period is used.

Table 7.2 Infant and child mortality by background characteristics

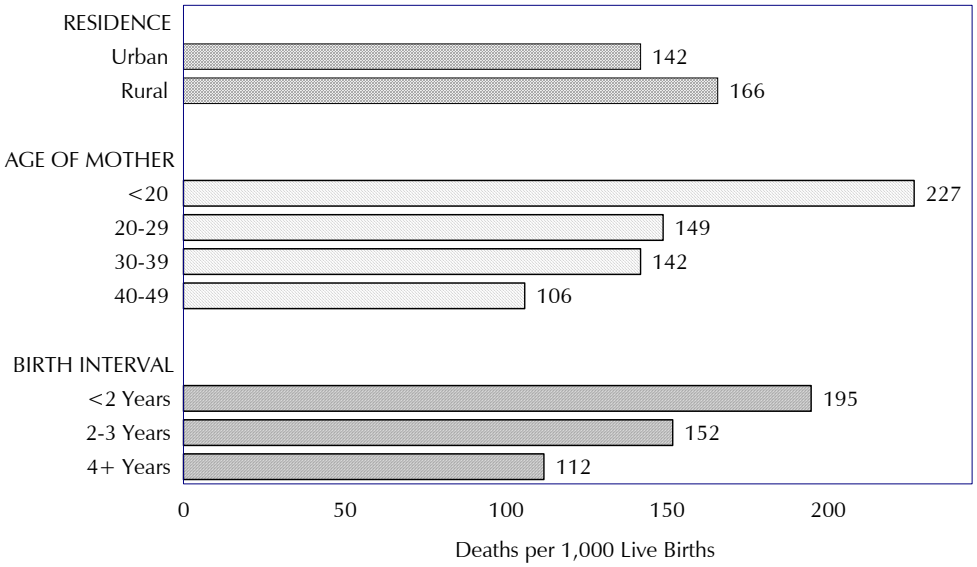
Neonatal, postneonatal, infant, and childhood mortality by selected background characteristics for the 10-year period preceding the survey, Tanzania 1999

Background characteristic	Neonatal mortality (NN)	Post-neonatal mortality (PNN)	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-five mortality ($_5q_0$)
Residence					
Urban	52.0	35.3	87.3	59.6	141.6
Rural	43.4	69.5	113.0	59.7	165.9
Mainland/Zanzibar					
Mainland	45.4	63.0	108.5	60.5	162.4
Urban	53.2	35.6	88.8	61.4	144.7
Rural	43.5	69.9	113.4	60.2	166.8
Zanzibar	35.2	47.9	83.0	34.1	114.3
Education					
No education	52.1	65.6	117.7	54.1	165.4
Primary incomplete	47.0	67.1	114.0	64.0	170.7
Primary complete+	40.5	59.4	99.9	61.4	155.2
Total	45.2	62.6	107.8	59.7	161.1

As expected, urban mortality rates are generally lower than in rural areas, as can be seen in Table 7.2 and Figure 7.1, where the urban under-five mortality rate is 142 per 1,000 versus 166 for rural areas. The difference is largest at the postneonatal period, while surprisingly, neonatal mortality is higher in urban areas. Comparing the Tanzanian Mainland and Zanzibar, as in the 1991-92 and 1996 surveys, mortality rates in Zanzibar continue to be lower than in the Mainland. From the 1999 TRCHS, infant mortality in Zanzibar is 24 percent lower than it is in the Mainland, while the under-five mortality rate is lower by 30 percent.

Table 7.2 also shows that mother's education has an inverse relationship with infant and under-five mortality. This conforms to the universal observation that children of educated mothers

Figure 7.1 Under-five Mortality by Selected Background Characteristics



Note: Rates are for the 10-year period preceding the survey.

TRCHS 1999

have lower mortality than those whose mothers are uneducated. Table 7.2 reveals that mortality rates for children born to mothers with no education are higher than those whose mothers have completed primary.

Studies have shown that demographic factors of both mother and child can have an impact on infant and child mortality. These factors include sex of the child, age of the mother at child's birth, birth order, length of previous birth interval, and the size of the child at birth. Table 7.3 presents mortality rates for the ten years preceding the survey by selected demographic characteristics.

The results show that male children experience higher mortality than female children, with under-five mortality rates of 172 and 150 deaths per 1,000 live births, for males and females, respectively. Children born to mothers younger than 20 years of age had higher mortality than children born to older mothers. Paradoxically, children born to older women (40-49 years) had the lowest under-five mortality (see Figure 7.1); however, for postneonatal mortality and infant mortality, the pattern is a U-shaped curve.

As expected, first births and higher order births experience higher infant mortality. For example, the infant mortality rate for first births (130 per 1,000) and births of order seven and higher (108) are substantially higher than the rate of 90 for birth order 4-6.

Information provided in Table 7.3 and Figure 7.1 shows that short birth intervals pose a high risk for child survival both during and after infancy. Children born less than two years after a preceding sibling are more likely to die before reaching age five than those born four or more years after a preceding sibling (195 versus 112 per 1,000). A similar pattern is observed for neonatal mortality, postneonatal mortality, and infant mortality. The findings suggest the need to reduce

mortality risks for Tanzanian children by promoting use of family planning and traditional practices, such as breastfeeding, to space children farther apart.

The size of a child at birth provides an important indicator of its survival during infancy. In the 1999 TRCHS, mothers were asked whether their young children were very small, small, average, large, or very large at birth. The mother's perception has been shown to correlate closely with the child's actual weight at birth, which is an important indicator for child growth monitoring. Newborns perceived by their mothers to be small or very small are much more likely to die in the first year of life (170 per 1,000 live births) than those perceived as average or larger in size (89 per 1,000 live births). A similar pattern of mortality is evident during the neonatal and postneonatal periods.

Table 7.3 Infant and child mortality by biodemographic characteristics

Infant and child mortality rates for the 10-year period preceding the survey, by selected biodemographic characteristics, Tanzania 1999

Biodemographic characteristic	Neonatal mortality (NN)	Post-neonatal mortality (PNN)	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-five mortality ($_5q_0$)
Sex of child					
Male	55.5	62.5	118.0	61.1	171.8
Female	34.4	62.8	97.2	58.3	149.8
Age of mother at birth					
< 20	76.1	88.2	164.4	74.5	226.6
20-29	35.0	53.6	88.6	66.7	149.3
30-39	45.6	61.1	106.7	39.7	142.1
40-49	(32.7)	(70.6)	(103.3)	(3.1)	(106.0)
Birth order					
1	64.0	66.4	130.4	63.3	185.5
2-3	42.1	65.6	107.7	71.2	171.2
4-6	27.2	62.6	89.8	59.0	143.5
7+	57.5	50.5	108.0	28.8	133.7
Previous birth interval					
< 2 years	51.7	89.7	141.4	62.9	195.4
2-3 years	38.9	54.3	93.2	64.3	151.5
4 or more years	28.5	51.1	79.6	34.9	111.7
Size at birth[1]					
Small or very small	90.1	79.5	169.6	NA	NA
Average or larger	33.6	55.3	88.8	NA	NA

Note: Figures in parentheses are rates based on 250-499 births.
[1] Refers to births in the three years before the survey
NA = Not applicable

7.4 HIGH-RISK FERTILITY BEHAVIOUR

Certain patterns of childbearing are associated with elevated levels of infant and child mortality. Typically, infants and children have a greater probability of dying early if they are born to mothers who are especially young or old, if they are born after a short birth interval, or if they are of high birth order. Data to examine these relationships are presented in Table 7.4, which shows the

distribution of births in the five years preceding the survey and of currently married women according to these categories of increased risk. In this analysis, a mother is classified as "too young" if she is less than 18 years of age and "too old" if she is over 34 years of age. A "short birth interval" is defined as a birth occurring less than 24 months after a previous birth, and a child is of "high birth order" if the mother had previously given birth to three or more children (i.e., if the child is of birth order 4 or higher). First births, although often at increased risk, are not placed in a high-risk category since they are not considered an avoidable risk.

Table 7.4 is further divided into two categories, with births falling into single high-risk categories (such as those born to mothers below the age of 18 or over the age of 34, those born within 24 months of a previous birth, and those of birth order higher than three) and those falling into multiple high-risk categories (e.g., those born within 24 months of a previous birth to mothers who are below the age of 18, or children of birth order greater than 3 who are born to mothers who are over 34 years, etc.).

The results indicate that well over half (57 percent) of children born in the five years before the survey have an elevated risk of dying; 39 percent of births are in a single high-risk category, while 18 percent are in a multiple high-risk category. The results also show that the most common high-risk category is high birth order. Looking at the single-risk categories, 26 percent of children are at increased risk because they are fourth births or higher, while 7 percent are born to mothers younger than 18 years and 6 percent are born less than two years after a prior birth. Among multiple high-risk categories, 11 percent of children are of birth order 4 or higher and were born to mothers age 35 and older. About 26 percent of recent births do not fall into any high-risk category and 16 percent fall into the unavoidable risk category.

The second column of Table 7.4 indicates the relative risk of dying for children born in the five years before the survey by comparing the proportion dead in each high-risk category with the proportion dead among children not in any high-risk category. Young age of mother at birth of child is a significant risk factor (relative risk ratio of 1.76), with 7 percent of births falling into this category. Older age of mother at birth of child is also associated with high mortality risks (relative risk ratio of 2.34). At even greater risk are births to young mothers that occur after a short birth interval (relative risk ratio of 2.85). Fortunately, however, the proportion of recent births falling in these two categories is very small, so that even though the fertility behaviour results in much higher risk of dying for the child, few children are subject to that higher risk.

Column 3 of Table 7.4 shows the distribution of currently married, non-sterilised women by risk category into which a currently conceived birth would fall. Three in four currently married women (73 percent) are at risk of conceiving a child who will have an elevated risk of dying. Forty-one percent of women are at risk due to multiple high-risk factors, while 32 percent are at risk due to a single high-risk factor. The most likely risks are due to high birth order alone (17 percent) or in combination with older age of mother at birth of child (24 percent of women).

Table 7.4 High-risk fertility behaviour

Percent distribution of children born in the five years preceding the survey by category of elevated risk of dying and risk ratio, and percent distribution of currently married women at risk of conceiving a child with an elevated risk of dying, by category of increased risk, Tanzania 1999

Risk category	Births in the 5 years preceding the survey		Percentage of currently married women[a]
	Percentage of births	Risk ratio	
Not in any high-risk category	26.2	1.00	20.7[b]
Unavoidable risk category			
First births to women 18-34	17.2	1.27	6.4
Single high-risk category			
Mother's age <18	6.5	1.76	1.5
Mother's age >34	0.2	2.34	3.5
Birth interval <24 months	6.3	1.32	9.4
Birth order >3	25.8	0.84	17.2
Subtotal	38.9	1.08	31.6
Multiple high-risk category			
Age <18 & birth interval <24 months[c]	0.5	2.85	0.4
Age >34 & birth interval <24 months	0.0	0.00	0.1
Age >34 & birth order >3	11.3	1.19	24.0
Age >34 & birth interval <24 months & birth order >3	1.3	1.51	5.4
Birth interval <24 months & birth order >3	4.6	1.00	11.4
Subtotal	17.7	1.21	41.3
In any high-risk category	56.6	1.12	72.9
Total	100.0	-	100.0
Number of births	3,282	-	2,653

Note: Risk ratio is the ratio of the proportion dead of births in a specific high-risk category to the proportion dead of births *not in any high-risk category*.

[a] Women were assigned to risk categories according to the status they would have at the birth of a child, if the child were conceived at the time of the survey: age less than 17 years and 3 months, age older than 34 years and 2 months, latest birth less than 15 months ago, and latest birth of order 3 or higher.

[b] Includes sterilised women

[c] Includes the combined categories *Age <18 and birth order >3*

REPRODUCTIVE AND CHILD HEALTH 8

This chapter presents findings related to maternal and child health in Tanzania. The areas examined include maternity care, vaccinations, and the prevalence and treatment of common childhood illnesses. The 1999 TRCHS information is important as it provides a critical look into the performance of the Maternal Child Health programme in Tanzania. The programme was initiated to support one of the health policy objectives, namely, the reduction of infant and maternal morbidity and mortality. The programme tries to improve the survival and development of women and children, who constitute 75 percent of the population of Tanzania. Provision of medical care during pregnancy and at delivery is essential for the survival of both the mother and the infant. Therefore, the survey results provide an opportunity to identify critical issues affecting the situation of women and children in Tanzania. The information will assist policy makers, planners, and other collaborators in the health sector to formulate appropriate strategies to improve maternal and child health care.

8.1 ANTENATAL CARE

Prevalence and Source of Antenatal Care

Table 8.1 shows the percent distribution of the most recent births to women who had a birth in the five years preceding the survey by source of antenatal care received by the mother, according to selected background characteristics. Interviewers asked women about all the people who provided care during the pregnancy; however, if more than one person was mentioned, then the one with the highest qualifications was recorded.

The results show that almost all pregnant women in Tanzania (98 percent) receive antenatal care. More than nine in ten births receive antenatal care from a medical professional (93 percent), mostly from health aides (44 percent) or nurses and midwives (43 percent) (see Figure 8.1). Doctors and medical assistants provide about 6 percent of all antenatal care services. Birth attendants provide only 1 percent of antenatal care.

Data on antenatal care by mother's age at birth shows that younger women are more likely to obtain antenatal care from more medically qualified personnel than older women. For example, 53 percent of women below age 20 who gave birth received antenatal care from a doctor or nurse of midwife, compared with 39 percent of women age 35 or above. The same pattern is observed for women according to birth order: lower order births are more likely to receive antenatal care from a doctor or nurse or midwife.

Significant variation in antenatal care is noted between rural and urban areas. Urban women are more likely than rural women to receive antenatal care from a doctor, nurse, or midwife (76 versus 41 percent). Half of pregnant women in rural areas receive antenatal care from a less-trained rural medical aide or maternal and child health (MCH) aide, probably because rural people receive most of their health care services from dispensaries that are run by these health aides.

In the Mainland, a greater percentage of antenatal care is provided by nurses and midwives than in Zanzibar (44 versus 14 percent); however, in Zanzibar, three-quarters of antenatal care is provided by health aides. Mothers in Unguja were more likely than those in Pemba to attend antenatal care clinics with doctors and nurses or midwives.

Table 8.1 Antenatal care

Among women who had births in the five years preceding the survey, percent distribution of the most recent births by source of antenatal care received by the mother, according to selected background characteristics, Tanzania 1999

Background characteristic	Antenatal care provider[1]						Total	Number of births
	Doctor	Nurse/ Midwife	Health aide	Birth attendant	Other	No one		
Mother's age at birth								
< 20	2.2	50.5	39.5	0.6	3.8	3.4	100.0	368
20-34	7.1	43.0	43.8	0.6	4.0	1.5	100.0	1,486
35+	3.1	35.6	47.6	2.3	5.9	5.6	100.0	329
Birth order								
1	6.3	49.7	37.1	0.0	3.1	3.9	100.0	498
2-3	7.5	44.4	41.8	1.6	3.8	0.8	100.0	719
4-5	4.6	41.0	49.1	0.0	4.8	0.5	100.0	479
6+	3.4	36.7	47.7	1.6	5.5	5.2	100.0	487
Residence								
Urban	15.3	60.9	22.0	0.3	0.9	0.5	100.0	502
Rural	2.8	37.8	50.1	1.0	5.2	3.0	100.0	1,681
Mainland/Zanzibar								
Mainland	5.6	43.8	42.9	0.9	4.3	2.4	100.0	2,131
Urban	15.5	62.0	20.8	0.3	1.0	0.4	100.0	487
Rural	2.7	38.5	49.4	1.1	5.3	3.0	100.0	1,644
Zanzibar	7.1	14.2	76.1	0.0	0.2	2.3	100.0	52
Pemba	2.2	7.4	88.2	0.0	0.4	1.8	100.0	24
Unguja	11.2	20.1	65.9	0.0	0.0	2.8	100.0	28
Mother's education								
No education	1.5	31.2	49.5	2.4	8.6	6.8	100.0	581
Primary incomplete	6.5	41.7	46.2	0.3	3.3	2.0	100.0	370
Primary complete	6.1	49.3	41.0	0.4	2.7	0.5	100.0	1,143
Secondary+	23.7	47.2	28.9	0.0	0.0	0.2	100.0	89
Total	5.7	43.1	43.7	0.9	4.2	2.4	100.0	2,183

Note: "Health aide" refers to both rural medical aides and MCH aides; "birth attendant" refers to both trained and traditional birth attendants. Village health workers are included in the "other" category.
[1] If the respondent mentioned more than one provider, only the most qualified provider was considered.

More-educated mothers are more likely to receive antenatal care from qualified medical personnel, such as doctors, nurses, and midwives, than are mothers with less education or no education. Some of this pattern is due to the concentration of doctors, nurses, and midwives, as well as more highly educated women, in urban areas.

Number and Timing of Antenatal Visits

Pregnant women are advised to start attending antenatal clinics before the 20th week of gestation so that their normal baseline health can be assessed and monitored regularly. At the first antenatal visit, a detailed history should be obtained and a full examination should be carried out. The recommended protocol for antenatal care calls for a woman with a normal pregnancy to visit an antenatal clinic at monthly intervals until the 28th week of pregnancy, then fortnightly until the 36th week, and weekly thereafter until labour begins. If the schedule is followed consistently, it is

anticipated that about 12 to 13 visits will be made. Pregnancy monitoring and detection of complications are the main objectives of antenatal care. The Ministry of Health considers women with the following characteristics to be at higher risk: gravida 5 or over, age under 16 or over 35, height under 150 cm, three consecutive abortions, prior caesarean section, anaemia, oedema, high blood pressure, proteinuria, failure to gain weight, antepartum haemorrhage, and abnormal lie. In the event of any complication, either more frequent antenatal visits are advisable or admission to a hospital may become necessary.

Table 8.2 presents data on the number of antenatal visits made by pregnant mothers and the stage of pregnancy at the first visit. Seventy percent of women whose last birth occurred in the five years before the survey made four or more antenatal care visits. However, the median number of antenatal visits is four, which indicates that most women do not make the recommended 12 to 13 antenatal visits. This low number of antenatal care visits is partly because pregnant women start antenatal care late, with the median month of first visit being 5.5 months. Comparing data from the 1991-92, 1996, and 1999 surveys shows only minor variation in antenatal care coverage, the number of visits, and the timing of the first visit.

Table 8.2 Number of antenatal care visits and stage of pregnancy

Percent distribution of live births in the past five years by number of antenatal care visits (ANC), and by the stage of pregnancy at the time of the first visit, Tanzania 1991-1999

Number and timing of ANC visits	TDHS 1991-92	TDHS 1996	TRCHS 1999[a]
Number of visits			
None	3.6	2.1	2.4
1	1.1	1.5	2.9
2-3 visits	23.5	22.5	23.1
4+ visits	69.5	69.5	69.9
Don't know/missing	2.4	4.4	1.6
Total	100.0	100.0	100.0
Median[b]	5.0	3.9	4.1
Number of months pregnant at first visit			
No antenatal care	3.6	2.1	2.4
< 6 months	60.1	60.5	61.4
6-7 months	34.0	34.7	32.0
8+ months	1.7	1.7	2.9
Don't know/missing	0.5	1.0	1.2
Total	100.0	100.0	100.0
Median[b]	5.6	5.6	5.5
Number of births	8,032	6,916	2,183

[a] Refers to most recent birth only
[b] For those with ANC

Antenatal Care Content

In the TRCHS, women who delivered a child in the five years before the survey were asked several questions about the types of antenatal care they received during the pregnancy that led to their most recent birth. Specifically, they were asked whether they were informed of the signs associated with serious pregnancy complications; whether they received a card listing the immunisations they received; and whether they were given or bought iron tablets or antimalarial medication.

As shown in Table 8.3, about four in ten women said they were informed about pregnancy complications, while roughly the same proportion said they were given a card that showed the immunisations they had received. Forty-four percent of women said they were given or bought iron tablets during their last pregnancy, and about one-third said they had access to anti-malarial medicine. Differences in antenatal care content by background characteristics are not large. Generally, urban women are more likely than rural women to have received all four items asked about, except that immunisation cards are more commonly given to rural women than to urban women. Similarly, better-educated women are more likely to receive all four antenatal care services than women with less education.

Table 8.3 Antenatal care content

Among women who have had births in the five years preceding the survey, percentage of the most recent births for which specific antenatal care was received, by content of antenatal care and selected background characteristics, Tanzania 1999

Background characteristic	Content of antenatal care				Number of births
	Informed of pregnancy complications	Has a card with immuni-sations	Given/ bought iron tablets	Given/ bought anti-malarials	
Mother's age at birth					
< 20	33.2	39.3	45.4	23.0	368
20-34	43.0	40.7	45.4	34.7	1,486
35+	42.4	33.2	38.8	32.5	329
Birth order					
1	37.6	38.2	45.9	33.2	498
2-3	42.2	43.4	47.0	30.0	719
4-5	44.0	41.4	44.1	35.9	479
6+	41.1	32.6	39.5	31.7	487
Residence					
Urban	52.6	37.0	49.8	41.9	502
Rural	37.9	40.0	42.8	29.6	1,681
Mainland/Zanzibar					
Mainland	41.4	39.4	44.6	32.4	2,131
Urban	52.7	37.1	49.9	42.2	487
Rural	38.0	40.0	43.0	29.5	1,644
Zanzibar	38.5	39.0	38.1	31.7	52
Pemba	26.7	37.6	29.3	35.2	24
Unguja	48.4	40.1	45.6	28.7	28
Mother's education					
No education	28.9	33.8	36.8	26.7	581
Primary incomplete	41.2	38.6	43.6	27.5	370
Primary complete	46.2	42.5	86.3	47.5	1,143
Secondary+	58.6	37.2	86.5	58.6	89
Total	41.3	39.3	44.4	32.4	2,183

Note: "Health aide" refers to both rural medical aides and MCH aides; while "birth attendant" refers to both trained and traditional birth attendants. Village health workers are included in the "other" category.

[1] If the respondent mentioned more than one provider, only the most qualified provider was considered.

Tetanus Toxoid Vaccination

Another important aspect of antenatal care is tetanus toxoid immunisation. Tetanus is still a relatively common cause of death among newborns in Tanzania and other developing countries. To address this problem, the Ministry of Health requires all women of reproductive age to be vaccinated with tetanus toxoid before they become pregnant. A baby is considered protected if the

mother received two doses of tetanus toxoid during pregnancy, with the second at least two weeks before delivery. However, if a woman was vaccinated during a previous pregnancy, she may only require one dose for the current pregnancy. Five doses are considered adequate to provide lifetime protection. To assess the status of tetanus vaccination coverage, women who gave birth during the five years before the survey were asked if they had received tetanus toxoid injections during the pregnancy for their most recent birth and, if so, how many.

The results reveal that 83 percent of women receive tetanus toxoid vaccinations during pregnancy (Table 8.4). However, only 61 percent receive the recommended two doses of the vaccine (Figure 8.1). Younger mothers and women pregnant with their first births are more likely than other women to receive two doses of tetanus toxoid. Urban women are also more likely than rural women to receive two doses of tetanus toxoid during pregnancy. The data imply that a substantial proportion of births in rural areas (around 42 percent) may not be protected against tetanus.

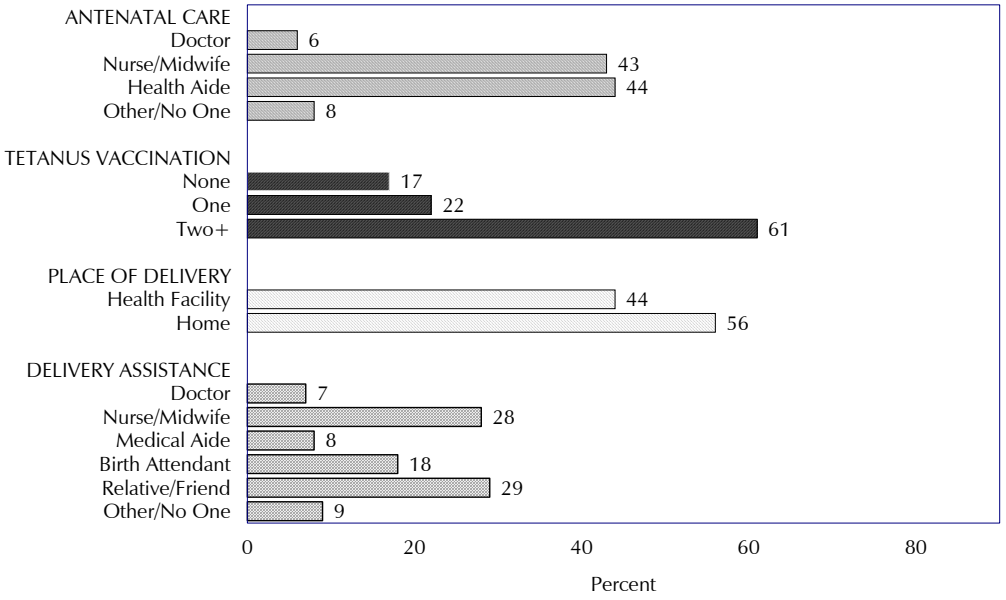
Pregnant women in the Mainland are substantially more likely than women in Zanzibar to

Table 8.4 Tetanus toxoid vaccinations

Among women who had births in the years preceding the survey, percent distribution of the most recent births by number of tetanus toxoid injections received during pregnancy, according to selected background characteristics, Tanzania 1999

Background characteristic	Number of tetanus toxoid injections					
	None	One dose	Two doses or more	Don't know/ missing	Total	Number of births
Mother's age at birth						
< 20	12.8	15.4	70.8	0.9	100.0	368
20-34	15.1	23.1	60.9	0.9	100.0	1,486
35+	26.9	21.5	51.3	0.3	100.0	329
Birth order						
1	11.4	14.3	73.1	1.1	100.0	498
2-3	14.4	25.9	59.1	0.6	100.0	719
4-5	15.2	22.9	61.2	0.7	100.0	479
6+	26.0	21.5	51.6	0.8	100.0	487
Residence						
Urban	7.9	16.9	74.4	0.7	100.0	502
Rural	19.1	23.0	57.1	0.8	100.0	1,681
Mainland/Zanzibar						
Mainland	16.5	21.2	61.5	0.8	100.0	2,131
Urban	7.8	16.4	75.1	0.7	100.0	487
Rural	19.1	22.7	57.4	0.8	100.0	1,644
Zanzibar	16.9	35.8	45.4	1.9	100.0	52
Pemba	19.5	35.4	43.2	1.9	100.0	24
Unguja	14.6	36.2	47.2	2.0	100.0	28
Mother's education						
No education	25.0	24.4	50.0	0.6	100.0	581
Primary incomplete	15.8	22.5	61.1	0.5	100.0	370
Primary complete	12.7	19.6	66.8	0.9	100.0	1,143
Secondary+	11.8	25.5	61.0	1.8	100.0	89
Total	16.5	21.6	61.1	0.8	100.0	2,183

Figure 8.1 Antenatal and Delivery Care Indicators



Note: Percentages are based on most recent birth in the five years preceding the survey. "Birth attendant" includes both trained and traditional birth attendants.

TRCHS 1999

receive two doses of tetanus toxoid (62 versus 45 percent). As expected, the proportion of regnant women who are vaccinated against tetanus increases with education.

8.2 DELIVERY CARE

Place of Delivery

Information about the place of delivery provides insight into the quality of services provided since deliveries at health facilities are regarded as more hygienic than those occurring at home. Proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that can cause death or serious illness to either the mother or the baby. Table 8.5 presents the distribution of births in the five years preceding the survey by place of delivery.

Just under half (44 percent) of births in Tanzania are delivered at a health facility of any kind, while 56 percent are delivered at home (Figure 8.1). It is interesting to note that the proportion of births delivered in health facilities has been declining steadily over time, from 53 percent in 1991-92 to 47 percent in 1996 and to 44 percent in 1999 (Ngallaba et al., 1993: 84 and Bureau of Statistics and Macro International, 1997: 110).

The proportion of births that take place in health facilities differs according to characteristics of the mother and the child. Births to younger women, first births, and births to urban women are much more likely than others to take place in a health facility. Women in the Mainland are also somewhat more likely to deliver in a health facility than women in Zanzibar. As expected, births to more-educated women are more likely to take place in hospitals and health centres.

Table 8.5 Place of delivery

Percent distribution of births in the five years preceding the survey by place of delivery, according to selected background characteristics, Tanzania 1999

Background characteristic	Place of delivery			Total	Number of births
	Health facility	Home	Don't know/ missing		
Mother's age at birth					
< 20	54.0	46.0	0.0	100.0	575
20-34	43.9	55.8	0.3	100.0	2,286
35+	27.1	72.6	0.2	100.0	422
Birth order					
1	59.9	40.0	0.0	100.0	769
2-3	46.6	53.3	0.1	100.0	1,100
4-5	38.3	61.2	0.5	100.0	715
6+	25.8	73.7	0.5	100.0	698
Residence					
Urban	82.8	17.2	0.1	100.0	614
Rural	34.5	65.3	0.3	100.0	2,668
Mainland/Zanzibar					
Mainland	43.7	56.1	0.2	100.0	3,196
Urban	83.4	16.5	0.1	100.0	591
Rural	34.7	65.0	0.3	100.0	2,605
Zanzibar	36.6	62.8	0.6	100.0	86
Pemba	26.2	72.8	1.0	100.0	42
Unguja	46.3	53.4	0.2	100.0	45
Mother's education					
No education	24.4	75.2	0.4	100.0	907
Primary incomplete	44.2	55.7	0.1	100.0	548
Primary complete	51.0	48.7	0.2	100.0	1,711
Secondary+	78.8	21.2	0.0	100.0	116
Total	43.5	56.3	0.2	100.0	3,282

Assistance during Delivery

The type of assistance a woman receives during childbirth has important health consequences for both mother and child. Therefore, besides collecting information on the place of delivery, the 1999 TDHS collected data on the type of personnel who assisted during delivery. Table 8.6 shows the percent distribution of births in the five years before the survey by type of assistance during delivery, according to background characteristics.

Overall, 36 percent of births are assisted by the most highly trained medical personnel (doctors, nurses and midwives), while 8 percent are assisted by lower-level health aides (rural medical aides and MCH aides). About 20 percent of deliveries are assisted by birth attendants (trained birth attendants and traditional birth attendants) or village health workers, some of whom may have received special training. Finally, 29 percent of births are assisted by only relatives and friends of the mother, while 7 percent are delivered without assistance.

First births and births to younger women are more likely than other births to be assisted by highly qualified health personnel. This finding is encouraging, given that medical staff recommend that young women and women expecting their first child deliver in a hospital since they are subject to higher risks.

Table 8.6 Assistance during delivery

Percent distribution of births in the five years preceding the survey by type of assistance during delivery, according to selected background characteristics, Tanzania 1999

Background characteristic	Attendant assisting during delivery[1]											
	Doctor	Nurse/ Midwife	Rural medical aide	MCH aide	Village health worker	Trained birth attend.	Trad. birth attend.	Relative/ other	No one	Don't know/ missing	Total	Number of births
Mother's age at birth												
< 20	9.8	33.2	4.8	5.4	3.0	8.1	5.7	27.6	2.5	0.0	100.0	575
20-34	7.0	29.5	2.3	5.6	1.6	11.3	7.3	28.1	6.9	0.3	100.0	2,286
35+	6.5	16.0	2.0	3.1	1.3	12.6	5.6	39.2	13.8	0.0	100.0	422
Birth order												
1	11.5	38.5	5.2	3.9	2.4	7.3	6.8	23.0	0.8	0.4	100.0	769
2-3	7.5	31.4	2.2	6.3	1.6	12.0	6.1	27.9	4.8	0.1	100.0	1,100
4-5	6.6	25.1	0.8	6.0	2.0	12.4	7.0	30.9	8.8	0.5	100.0	715
6+	3.7	16.1	2.6	4.3	1.3	11.4	7.5	37.5	15.5	0.1	100.0	698
Residence												
Urban	16.6	60.1	3.5	3.1	0.7	6.1	2.4	6.0	1.1	0.4	100.0	614
Rural	5.3	21.1	2.5	5.8	2.1	12.0	7.8	34.8	8.4	0.2	100.0	2,668
Mainland/Zanzibar												
Mainland	7.6	28.2	2.8	5.3	1.9	10.5	6.2	30.2	7.2	0.2	100.0	3,196
Urban	17.1	60.0	3.6	3.1	0.8	6.0	1.9	6.1	1.1	0.4	100.0	591
Rural	5.4	21.1	2.6	5.8	2.1	11.5	7.1	35.6	8.6	0.2	100.0	2,605
Zanzibar	1.5	35.3	0.5	3.9	0.1	26.1	28.9	2.2	0.6	0.8	100.0	86
Pemba	0.8	24.5	0.2	3.1	0.3	44.3	24.1	1.2	0.0	1.4	100.0	42
Unguja	2.0	45.4	0.7	4.7	0.0	9.1	33.5	3.1	1.2	0.2	100.0	45
Mother's education												
No education	5.3	14.1	2.0	4.0	1.4	7.7	8.2	46.5	10.4	0.3	100.0	907
Primary incomplete	5.1	28.7	3.0	6.4	1.9	10.8	5.1	30.6	8.1	0.1	100.0	548
Primary complete	8.4	33.8	3.1	5.9	2.1	12.9	6.4	21.6	5.3	0.2	100.0	1,711
Secondary+	20.0	59.6	0.9	0.9	0.0	5.4	8.9	4.1	0.1	0.1	100.0	116
Total	7.4	28.4	2.7	5.3	1.8	10.9	6.8	29.4	7.0	0.2	100.0	3,282

[1] If the respondent mentioned more than one attendant, only the most qualified attendant was considered.

As expected, births in urban areas are more likely than rural births to be assisted by qualified medical personnel. More than three-quarters of births in urban areas are assisted by doctors, nurses or midwives, compared with only 26 percent of births in rural areas. In the Mainland, births are more likely to be assisted by relatives and friends (30 percent) or to be delivered without assistance; however, in Zanzibar, births are more likely to be supervised by nurses or midwives or by birth attendants, whether trained or traditional.

The mother's education is also associated with the type of delivery assistance. The percentage of births assisted by doctors, nurses and midwives increases from 19 percent of births to women with no education to 80 percent of births to women who have some secondary school.

Characteristics of Delivery

Other aspects of maternal health that were included in the survey are information on delivery by caesarean section, birth weight, and the mother's estimate of the baby's size at birth (Table 8.7). Only 3 percent of babies are delivered by caesarean section, which is fractionally higher than the 2 percent found in the 1996 TDHS. Caesarean deliveries decline among older

Table 8.7 Delivery characteristics: caesarean section, birth weight and size

Among births in the five years preceding the survey, the percentage of deliveries by caesarean section, and the percent distribution by birth weight and by the mother's estimate of baby's size at birth, according to selected background characteristics, Tanzania 1999

Background characteristic	Delivery by C-section	Birth weight: Less than 2.5 kg	Birth weight: 2.5 kg or more	Birth weight: Don't know	Birth weight: Total	Size of child at birth: Very small	Size of child at birth: Smaller than average	Size of child at birth: Average or larger	Size of child at birth: Don't know	Size of child at birth: Total	Number of births
Mother's age at birth											
<20	4.9	6.9	46.9	46.1	100.0	5.7	7.6	86.5	0.2	100.0	575
20-34	2.9	3.4	41.5	55.1	100.0	3.1	7.3	89.4	0.1	100.0	2,286
35+	0.7	1.5	25.0	73.6	100.0	3.9	7.8	88.3	0.0	100.0	422
Birth order											
1	7.6	6.5	51.3	42.2	100.0	5.9	7.7	86.2	0.2	100.0	769
2-3	2.4	2.9	45.2	51.9	100.0	2.5	6.4	91.0	0.0	100.0	1,100
4-5	0.9	2.7	38.0	59.3	100.0	1.9	7.5	90.2	0.4	100.0	715
6+	0.7	3.4	22.7	74.0	100.0	4.8	8.8	86.5	0.0	100.0	698
Residence											
Urban	6.8	6.2	75.9	17.9	100.0	4.5	4.7	90.7	0.2	100.0	614
Rural	2.1	3.2	32.1	64.7	100.0	3.5	8.1	88.3	0.1	100.0	2,668
Mainland/Zanzibar											
Mainland	3.0	3.8	40.6	55.6	100.0	3.6	7.3	89.0	0.1	100.0	3,196
Urban	7.0	6.2	76.6	17.2	100.0	4.5	4.5	90.9	0.1	100.0	591
Rural	2.1	3.2	32.4	64.4	100.0	3.4	7.9	88.6	0.1	100.0	2,605
Zanzibar	1.1	4.0	29.6	66.4	100.0	7.0	14.3	78.0	0.7	100.0	86
Pemba	0.9	3.4	17.3	79.4	100.0	9.6	19.8	69.4	1.2	100.0	42
Unguja	1.2	4.6	41.1	54.2	100.0	4.5	9.2	86.1	0.2	100.0	45
Mother's education											
No education	0.9	3.3	21.0	75.7	100.0	2.9	10.1	86.9	0.1	100.0	907
Primary incomplete	1.4	3.8	42.4	53.8	100.0	4.5	5.9	89.4	0.3	100.0	548
Primary complete	4.4	4.1	47.5	48.5	100.0	3.7	6.8	89.3	0.2	100.0	1,711
Secondary+	4.2	3.2	75.6	21.2	100.0	4.2	3.7	92.1	0.0	100.0	116
Total	2.9	3.8	40.3	55.9	100.0	3.7	7.4	88.7	0.1	100.0	3,282

mothers and among higher-order births. Also, caesarean sections are less common among rural women, women in Zanzibar, and women with little or no education.

Information on birth weight was available for only 44 percent of births. However, it shows that 9 percent of those weighed (4 percent of all births) were reported to have a weight of less than 2.5 kg, which is considered low birth weight. Younger mothers are more likely to give birth to babies of low birth weight than older mothers. Although it appears as if urban mothers have a higher percentage of low birth weight babies than rural mothers, the differential disappears when only those who were weighed are considered.

According to the respondent's assessment of her baby's size at birth, the vast majority of births (89 percent) are classified as average or larger than average. Only 11 percent of births were reported to be either small (7 percent) or very small (4 percent). There has been no significant change in these proportions since 1996.

8.3 POSTNATAL CARE

Postnatal care is the care provided to the mother after delivery to check for any complications arising from the delivery and to provide the mother with important information on how to care for herself and her child. The timing of postnatal care is important. The optimal timing is within two days of delivery, since most maternal and neonatal deaths occur in this period. Proper postnatal care can reduce the risk of maternal mortality, which is still very high in Tanzania.

Table 8.8 presents information on postnatal care after the most recent birth for women who gave birth in the five years preceding the survey. Since it was assumed that women who delivered in health facilities would receive a routine postnatal examination, only women who delivered at home were asked about postnatal care. The data show that a large proportion of women do not receive any postnatal care (38 percent). If it is assumed that all women who deliver in health facilities are examined within two days of delivering, then only about half (52 percent) of all new mothers receive postnatal care within the critical two-day period. Encouraging women to seek postnatal care and to do so soon after their child's birth could serve to reduce maternal morbidity and mortality. This message should be aimed at older mothers in rural areas and in Zanzibar, a large

Table 8.8 Postnatal care

Among women who had births in the five years preceding the survey, percent distribution of the most recent births by whether mother received postnatal care, and timing of first postnatal check-up for women who delivered at home, according to background characteristics, Tanzania 1999

Background characteristic	Delivered in health facility (received postnatal care)	Timing of first postnatal check-up for women who delivered at home					Total	Number of births
		Within 2 days of birth	3-7 days after birth	8-27 days after birth	4+ weeks after birth	No post-natal care		
Mother's age at birth								
< 20	54.5	6.0	1.7	0.9	4.6	32.3	100.0	368
20-34	47.3	5.8	2.9	0.4	7.7	35.8	100.0	1,486
35+	27.8	7.3	3.1	0.0	5.9	55.9	100.0	329
Birth order								
1	62.1	3.9	1.6	0.2	3.9	28.3	100.0	498
2-3	49.3	5.9	2.9	1.0	7.4	33.5	100.0	719
4-5	41.2	7.5	2.9	0.0	8.1	40.4	100.0	479
6+	27.7	7.2	3.5	0.3	7.9	53.4	100.0	487
Residence								
Urban	83.4	3.0	2.2	0.4	1.9	9.1	100.0	502
Rural	34.3	7.0	2.9	0.5	8.4	47.0	100.0	1,681
Mainland/Zanzibar								
Mainland	45.7	6.1	2.8	0.5	7.0	37.9	100.0	2,131
Urban	83.9	2.9	2.3	0.4	1.9	8.6	100.0	487
Rural	34.4	7.1	2.9	0.5	8.5	46.6	100.0	1,644
Zanzibar	39.9	4.7	0.6	0.0	1.0	53.8	100.0	52
Pemba	29.5	2.9	0.9	0.0	1.1	65.6	100.0	24
Unguja	48.7	6.3	0.3	0.0	0.9	43.8	100.0	28
Mother's education								
No education	24.5	6.7	3.7	0.0	8.7	56.4	100.0	581
Primary incomplete	47.2	8.0	3.3	0.0	5.9	35.6	100.0	370
Primary complete	53.2	5.4	2.3	0.8	6.5	31.9	100.0	1,143
Secondary+	78.8	3.5	0.0	1.2	3.9	12.6	100.0	89
Total	45.6	6.1	2.7	0.4	6.9	38.3	100.0	2,183

majority of whom do not receive any postnatal care.

Adequate stores of vitamin A are necessary to maintain good health and fight disease. Since pregnancy and childbirth deplete the body's supply of vitamin A, women are encouraged to take supplements soon after giving birth (vitamin A supplementation during pregnancy can be toxic). To monitor postpartum supplementation coverage, women who gave birth within 12 months prior to the survey were asked in the TRCHS whether they received a vitamin A supplement within 2 months after the delivery.

As shown in Table 8.9, only 12 percent of new mothers said they had received a vitamin A supplement. Coverage is much higher among mothers in the Mainland, among women who deliver in health facilities, and among better-educated women.

8.4 BIRTH REGISTRATION

One of the universal rights of children is to have their birth registered and to have a birth certificate. Collection of vital statistics started in Tanzania in the early 1960s. By 1985, the system covered 12 districts in 5 regions. Today most regions and districts are fully covered, except seven regions where the project is yet to extend its services: Lindi, Mtwara, Ruvuma, Rukwa, Kigoma, Kagera, and Mbeya. In the 1999 TRCHS, mothers of children under five were asked whether their child's birth had been registered and whether they had a birth certificate for the child. Because it was expected that respondents might confuse hospital or baptism certificates for official birth certificates, interviewers were instructed to examine the certificate carefully. A child's birth was considered to have been registered if his or her mother could either produce a birth certificate or said the birth was registered.

Only 6 percent of births in Tanzania are registered (Table 8.10). The main reasons for not registering births are not knowing that it is necessary to register them and not knowing where to go to do so. As might be expected, birth registration is more common in urban areas and among women with more education. It is also considerably higher in Zanzibar than in the Mainland.

Table 8.9 Postpartum vitamin A supplements

Percentage of women with a birth in the 12 months preceding the survey who received a vitamin A supplement within two months after delivery, Tanzania 1999

Background characteristic	Received vitamin A	Number of women
Residence		
Urban	13.9	125
Rural	11.2	559
Mainland/Zanzibar		
Mainland	12.0	666
Urban	14.2	121
Rural	11.4	545
Zanzibar	2.1	18
Pemba	1.0	9
Unguja	3.2	9
Mother's education		
No education	9.7	193
Primary incomplete	9.4	108
Primary complete	12.8	358
Secondary+	20.5	25
Place of delivery		
Health facility	18.1	250
Home	8.0	432
Total	11.7	684

Table 8.10 Birth registration coverage

Percent distribution of children under five by whether birth is registered or a certificate seen and reasons for non-registration, Tanzania 1999

Background characteristic	Birth is registered	Reason birth not registered							Total	Number of children
		Cost too much	Must travel too far	Didn't know must be registered	Late, did not want to pay fine	Didn't know where to register	Other	Missing		
Child's age in months										
< 6 months	6.5	4.3	3.1	31.3	2.7	36.2	7.8	8.0	100.0	326
6-11 months	5.3	2.1	5.6	29.3	3.2	46.0	2.5	6.0	100.0	310
12-23 months	5.0	3.3	4.1	37.8	2.6	37.8	3.5	5.9	100.0	593
24-35 months	9.5	3.0	2.9	38.3	3.4	32.3	3.9	6.7	100.0	588
36-47 months	5.3	2.6	4.1	34.7	1.5	39.4	4.0	8.4	100.0	528
48-59 months	6.4	3.2	2.6	41.0	1.6	33.8	2.2	9.3	100.0	554
Sex										
Male	7.5	2.5	3.2	37.5	2.1	36.3	4.0	6.9	100.0	1,463
Female	5.4	3.6	4.0	35.1	2.8	37.5	3.6	7.9	100.0	1,436
Residence										
Urban	21.8	5.5	1.3	30.6	6.2	20.8	8.1	5.7	100.0	546
Rural	2.9	2.5	4.1	37.6	1.6	40.6	2.8	7.8	100.0	2,353
Mainland/Zanzibar										
Mainland	4.7	3.0	3.6	37.1	2.5	37.8	3.7	7.6	100.0	2,820
Urban	18.7	5.7	1.4	31.9	6.5	21.7	8.3	5.9	100.0	523
Rural	1.5	2.4	4.1	38.3	1.6	41.5	2.7	7.9	100.0	2,297
Zanzibar	68.9	4.5	3.7	8.4	1.8	5.4	6.1	1.2	100.0	78
Pemba	52.4	7.3	7.0	13.2	1.5	9.7	7.7	1.2	100.0	38
Unguja	84.4	1.9	0.6	3.8	2.0	1.4	4.6	1.3	100.0	40
Mother's education										
No education	2.7	0.8	2.7	41.6	0.2	38.8	2.7	10.3	100.0	807
Primary incomplete	3.7	4.5	5.2	33.3	3.1	40.2	3.6	6.5	100.0	476
Primary complete	6.2	4.0	3.3	36.1	3.3	36.6	4.0	7.8	100.0	1,506
Secondary+	49.2	0.1	6.8	13.6	4.6	12.5	9.6	3.5	100.0	108
Total	6.4	3.1	3.6	36.3	2.4	36.9	3.8	7.4	100.0	2,898

8.5 CHILDHOOD VACCINATIONS

Diseases caused by viruses, bacteria, and parasites cause immense human misery and kill many thousands annually, especially young children. One of Tanzania's health policy objectives is to reduce infant and child mortality by controlling communicable diseases. Vaccines have proven invaluable in fighting several childhood illnesses, including poliomyelitis, measles, rubella, and tetanus. The immunisation programme in Tanzania is implemented by the Ministry of Health through the Expanded Programme on Immunisation (EPI), which started in 1975 and was established throughout the country in 1996.

The EPI programme in Tanzania follows the World Health Organisation's (WHO) guidelines for vaccinating children. To be considered fully vaccinated, a child should receive a dose of BCG vaccine against tuberculosis at birth or soon after; three doses of DPT for the prevention of diphtheria, pertussis (whooping cough), and tetanus; at least three doses of polio vaccine; and a vaccination against measles. The DPT and polio vaccinations should be given at approximately 4,

8, and 12 weeks of age; more recently, a dose of polio vaccine at birth has been added to the schedule. Measles vaccine should be given at or soon after the child reaches nine months. Although in Tanzania children's vaccination schedules are followed up until the child reaches five years of age, WHO recommends that children receive the complete schedule of vaccinations before 12 months of age and that the vaccinations be recorded on a health card given to the parents or caretaker.

Information on vaccination status was collected from vaccination cards shown to the interviewer and from mothers' verbal reports if no card was available. The Child Health Card is given to children at their first contact with health services and is used until the child's fifth birthday. It is used for recording information on growth monitoring, child immunisations, and morbidity. If the cards were available, the interviewers copied vaccination dates directly onto the questionnaire. If a vaccination card was presented but a vaccine had not been recorded on the card as having been given, the mother was asked to recall whether that particular vaccine had been given. The mother was then asked whether the child had received other vaccinations that were not recorded on the card, and, if so, they too were noted on the questionnaire. If the mother was not able to provide a card for the child, she was asked to recall whether the child had received BCG, polio, DPT (including the number of doses for each), and measles vaccinations. The information collected covered all children under age five, although data presented here are restricted to children age 12-23 months to better reflect children who have reached the age by which they should be fully vaccinated.

Information on vaccination coverage among children age 12–23 months is shown in Table 8.11 according to the source of information used to determine coverage, i.e., vaccination record or mother's report. Health cards were presented for almost three-quarters (74 percent) of the children age 12–23 months. The third row of the table shows the proportion of children who were immunised at any age up to the time of the survey, while the last row shows the proportion who were vaccinated by age 12 months, the age at which vaccination coverage should be complete.

According to information from both the vaccination records and mothers' recall, only 68 percent of Tanzanian children 12-23 months can be considered fully immunised. Although the level of coverage for BCG and the first doses of DPT and polio exceeds 90 percent, the proportion

Table 8.11 Vaccinations by source of information

Percentage of children 12-23 months who had received specific vaccines at any time before the survey, by source of information about vaccination, and the percentage vaccinated by 12 months of age, Tanzania 1999

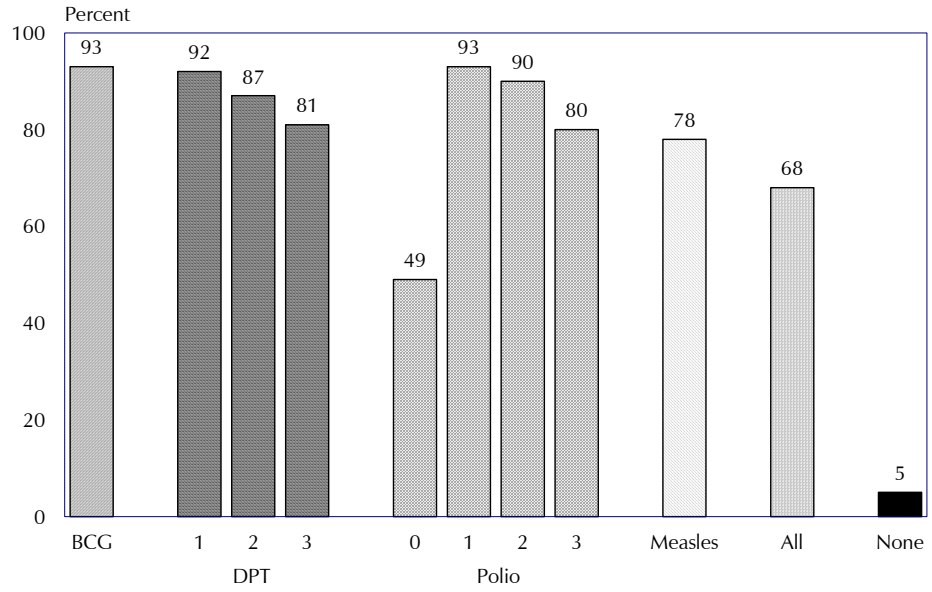
Source of information	Percentage of children who had received:											Number of children
	BCG	DPT 1	DPT 2	DPT 3	Polio[1] 0	Polio[1] 1	Polio[1] 2	Polio[1] 3	Measles	All[2]	No vaccinations	
Vaccinated at any time before the survey												
Vaccination card	73.1	73.1	70.5	68.9	41.1	73.3	71.0	67.7	63.7	60.9	0.0	439
Mother's report	19.6	18.8	16.9	12.1	8.0	19.8	18.6	12.2	14.4	7.4	5.3	154
Either source	92.7	91.9	87.4	81.0	49.1	93.1	89.6	79.9	78.1	68.3	5.3	593
Vaccinated by 12 months of age	92.0	91.4	86.1	77.3	49.1	92.6	88.4	77.2	69.3	58.5	5.3	593

Note: For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccination.
[1] Polio 0 is given at birth.
[2] Children who are fully vaccinated (i.e., those who have received BCG, measles, and three doses of DPT and polio (excluding polio 0).

who go on to receive the third dose of these last two vaccines falls off to 81 percent for DPT and 80 for polio (Figure 8.2); dropout rates[1] between the first and third doses of DPT and polio are thus 12 and 14 percent, respectively. Seventy-eight percent of children age 12-23 months have received the measles vaccine. Only 5 percent of children have not received any vaccinations at all.

Taking into account WHO recommendations that children should receive the complete schedule by 12 months of age, 59 percent of children age 12–23 months received all of the

Figure 8.2 **Percentage of Children Age 12-23 Months with Specific Vaccinations according to Vaccination Cards and Mothers' Reports**



TRCHS 1999

recommended vaccinations before their first birthday.

Overall vaccination coverage since 1991-92 has declined slightly, from 71 to 68 percent of children 12-23 months fully immunised.

Table 8.12 shows vaccination coverage among children age 12–23 months by sex, birth order, residence, and mother's education. The table also includes information on the percentage of children for whom a vaccination card was shown to the interviewer. Boys have slightly higher vaccination coverage than girls, 70 versus 67 percent. The proportion of children fully immunised declines as birth order increases, from 79 percent for first births to 60 percent of sixth and higher births.

[1] Dropout rate = (Dose 1 - Dose 3) * 100 / Dose 1

Table 8.12 Vaccinations by background characteristics

Percentage of children 12-23 months who had received specific vaccines by the time of the survey (according to the vaccination card or the mother's report), and the percentage with a vaccination card, according to selected background characteristics, Tanzania 1999

Background characteristic	Percentage of children who received: BCG	DPT 1	DPT 2	DPT 3	Polio[1] 0	Polio[1] 1	Polio[1] 2	Polio[1] 3	Measles	All[2]	Percent-No vacci-nations	Percent-age with a card	Number of children
Child's sex													
Male	91.7	92.6	88.6	83.1	45.8	93.1	90.1	80.4	79.8	69.8	6.0	72.5	334
Female	94.0	91.1	85.9	78.2	53.3	93.2	88.9	79.4	76.0	66.5	4.5	76.2	259
Birth order													
1	93.8	96.0	93.9	87.7	62.0	97.0	93.1	85.3	91.6	78.8	3.0	74.5	115
2-3	92.4	92.9	86.4	84.2	52.2	92.9	91.0	84.2	76.3	70.2	6.6	73.5	210
4-5	95.2	90.6	88.6	81.1	53.1	91.2	88.4	73.9	77.5	65.0	3.9	78.4	136
6+	89.8	88.2	82.2	69.9	28.6	92.3	85.4	74.8	70.1	59.6	6.7	70.1	131
Residence													
Urban	100.0	96.0	95.5	89.9	74.8	96.5	95.1	84.8	90.3	80.5	0.0	69.6	112
Rural	91.0	91.0	85.6	78.9	43.1	92.4	88.3	78.8	75.3	65.5	6.5	75.1	481
Mainland/Zanzibar													
Mainland	92.6	91.8	87.3	80.9	49.3	93.0	89.5	79.9	78.2	68.3	5.4	74.0	578
Urban	100.0	95.9	95.5	90.0	76.0	96.3	95.0	84.6	90.6	80.6	0.0	69.1	107
Rural	90.9	90.9	85.5	78.9	43.3	92.3	88.2	78.8	75.4	65.5	6.6	75.2	471
Zanzibar	97.8	95.8	92.4	83.3	39.5	97.0	93.6	82.8	75.0	70.0	1.6	75.6	15
Pemba	95.8	93.5	88.0	71.6	35.3	95.7	90.3	70.6	61.5	51.8	3.2	66.5	8
Unguja	100.0	98.3	97.0	95.8	44.0	98.3	97.0	95.8	89.4	89.4	0.0	85.4	7
Mother's education													
No education	86.2	85.5	74.8	65.4	35.5	87.8	80.7	67.5	63.3	49.5	11.3	67.2	155
Primary incomplete	90.6	86.7	84.3	74.3	45.4	87.5	85.3	74.0	75.3	66.9	7.6	78.7	112
Primary complete	96.3	96.5	94.2	91.7	56.1	97.5	95.0	87.0	85.2	78.2	1.8	76.1	302
Secondary+	*	*	*	*	*	*	*	*	*	*	*	*	24
Total	92.7	91.9	87.4	81.0	49.1	93.1	89.6	79.9	78.1	68.3	5.3	74.1	593

Note: For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccination. An asterisk indicates that a figure has been suppressed because it is based on fewer than 25 respondents.
[1] Polio 0 is given at birth.
[2] Children who are fully vaccinated (i.e., those who have received BCG, measles, and three doses of DPT and polio (excluding polio 0).

As has been observed in prior surveys, vaccination coverage is slightly higher in Zanzibar than in the Mainland. Unguja has considerably higher vaccination coverage (89 percent) than Pemba (52 percent), which is due to the steep dropout rate in Pemba between the second and third doses of DPT and polio vaccine and the low rate of measles immunisation. Immunisation coverage improves substantially as mother's level of education increases, from 50 percent of children whose mothers have no education to 78 percent of children whose mothers have completed some primary school.

8.6 ACUTE RESPIRATORY INFECTION AND FEVER

Acute respiratory infection (ARI) is among the leading causes of morbidity and mortality among young children in Tanzania. Of the acute respiratory diseases, pneumonia is the most serious for young children. Improvement in children's nutritional status is regarded as the best and most effective strategy for reducing the severity of acute respiratory infections because children could withstand the effects and recover more quickly. Nevertheless, early diagnosis and treatment with antibiotics can prevent a large proportion of deaths from respiratory infection, especially infection

that includes fever, cough, and difficult or rapid breathing.

Fever symptoms are also associated with malaria in many cases. Malaria is a leading cause of outpatient attendance, admissions, and deaths, especially among children under five. According to a survey conducted by the Ministry of Health in three districts (Morogoro Rural, Dar es Salaam, and Hai), malaria causes about 45 percent of all deaths among children under five in Morogoro, about 25 percent in Dar es Salaam, and about 20 percent in Hai.

To quantify the prevalence of ARI and fever, mothers were asked whether their children under age five had been ill with a cough accompanied by short rapid breathing or with a fever during the two weeks before the survey. Mothers whose children had experienced these symptoms were asked whether they sought advice or treatment from a health professional or at a health facility. If the child had suffered from fever during the previous two weeks, the mother was asked whether the child took medicine for the fever and, if so, which kind. While information on disease prevalence is highly dependent on correct reporting and proper diagnosis of symptoms, the accuracy of information on treatment practices depends on how much mothers know about the medicines that were given to their children. The aim in the TRCHS was to gain a general knowledge about the management of ill children. Table 8.13 presents the percentage of children under five who were ill with a cough accompanied by fast breathing and the percentage who were ill with fever during the two weeks before the survey.

The data show that 14 percent of children had a cough and rapid breathing in the two weeks before the survey. Prevalence of ARI symptoms varies by age of the child, being highest among children age 6-11 months (26 percent) and declining slowly to 8 percent among those age 48-59 months. Variation in ARI prevalence is not significant by child's sex, birth order, or residence or by mother's level of education. Zanzibar has a higher prevalence of children with ARI symptoms (18 percent) than the Mainland (14 percent), which is entirely due to the relatively high level in Pemba (23 percent).

More than one-third of children under five were reported to have had a fever in the two weeks prior to the survey. Fever is more prevalent among children age 6-23 months and among children who live in Pemba. More than half (53 percent) of children with fever were treated with antimalarial medicine (i.e. chloroquine). More than two-thirds of children with respiratory infections and/or fever were taken to a health facility.

8.7 USE OF BEDNETS

Consistent use of insecticide-treated bednets can substantially reduce the transmission of malaria. Donor organisations are supporting commercial marketing of treated bednets in an effort to expand their use. In order to gauge the extent of bednet use, respondents to the household interview were asked whether the household had any bednets and, if so, whether all, some, or none of the children under age five slept under a bednet the night before the interview. They were also asked if the bednets had been treated with an insecticide, since treated bednets are more effective than untreated ones.

The data show that use of bednets is minimal in Tanzania (Table 8.14). Of households with at least one child under five, only 21 percent reported that all children under five slept under a bednet the night prior to the interview, while 4 percent reported that only some of the children spent the night under a bednet. Of the households in which some children slept under a bednet, only 10 percent reported that the net had ever been treated with insecticide. There are substantial differences between urban and rural households, with more urban households using bednets

(52 percent) than rural households (17 percent). Use of bednets is also higher in Zanzibar than in the Mainland.

Table 8.13 Prevalence and treatment of acute respiratory infection and prevalence of fever

Among all children under five years of age, the percentage who were ill with a cough accompanied by rapid breathing and the percentage who were ill with fever during the two weeks preceding the survey, the percentage of children with fever given antimalarial medicine, and the percentage of children with fever or cough taken to a health facility or provider, according to selected background characteristics, Tanzania 1999

Background characteristic	Percentage with cough accompanied by rapid breathing (ARI)	Percentage with fever	Among children with fever percentage given antimalarial medicine	Among children with fever or cough, percentage taken to a health facility or provider	Number of children with fever or cough	Number of children
Child's age						
< 6 months	12.3	32.1	45.4	55.5	119	326
6-11 months	26.1	50.7	59.7	70.2	179	310
12-23 months	19.7	50.8	54.0	69.3	319	593
24-35 months	12.3	32.0	51.1	74.2	203	588
36-47 months	9.1	29.4	51.6	66.1	168	528
48-59 months	8.1	20.2	57.0	61.6	129	554
Child's sex						
Male	14.4	36.5	54.3	69.2	583	1,463
Female	13.4	33.7	52.4	65.7	534	1,436
Birth order						
1	14.3	34.1	59.2	69.7	247	655
2-3	13.3	35.4	51.6	65.5	379	974
4-5	14.1	37.4	52.4	70.6	261	642
6+	14.3	33.4	51.6	64.8	230	628
Residence						
Urban	12.2	33.4	61.7	78.4	201	546
Rural	14.3	35.5	51.6	65.1	917	2,353
Mainland/Zanzibar						
Mainland	13.8	35.0	53.0	67.3	1,083	2,820
Urban	12.1	33.6	61.2	78.5	193	523
Rural	14.1	35.4	51.2	64.9	890	2,297
Zanzibar	18.4	38.6	68.4	72.9	34	78
Pemba	23.3	49.0	67.5	69.8	21	38
Unguja	13.8	28.8	69.8	77.7	13	40
Mother's education						
No education	13.2	37.1	44.3	59.5	312	807
Primary incomplete	13.4	33.5	51.9	67.7	179	476
Primary complete	14.3	35.4	58.2	71.1	595	1,506
Secondary+	15.1	24.6	(70.3)	(77.3)	31	108
Total	13.9	35.1	53.4	67.5	1,117	2,898

Note: Codes for antimalarial medicines included both Fansidar and chloroquine; however, the proportion citing Fansider was less then half a percent.
ARI = Acute respiratory infection

8.8 PREVALENCE AND TREATMENT OF DIARRHOEA

Diarrhoea is one of the major causes of morbidity and mortality among young children in Tanzania. The problem becomes more prominent in children after six months of age, when children start to crawl and eat supplementary foods. In the 1999 TRCHS, mothers were asked whether their children under five had diarrhoea in the two weeks preceding the survey. If so, the mother was asked what, if anything, had been done to treat the diarrhoea. Since the prevalence of diarrhoea varies seasonally, the results pertain only to the pattern during the September-November period when the TRCHS interviewing took place.

Table 8.14 Use of bednets

Percent distribution of households with children under five by use of bednets by children under five the night before the interview, and by use of insecticide to treat bednets, according to selected background characteristics, Tanzania 1999

Background characteristic	Use of bednets by children under five during the previous night				Use of insecticide to treat bednets				Number of households	
	All children	Some children	No children	Don't know missing	Total	Ever treated bednet	Never treated bednet	Don't know	Total	with children under 5
Residence										
Urban	47.9	4.5	46.6	1.0	100.0	10.1	83.4	6.5	100.0	415
Rural	13.0	4.1	82.1	0.8	100.0	10.3	87.3	2.4	100.0	1,471
Mainland/Zanzibar										
Mainland	20.3	4.1	74.9	0.8	100.0	10.4	85.1	4.5	100.0	1,836
Urban	47.6	4.4	47.0	1.0	100.0	10.3	82.9	6.8	100.0	401
Rural	12.7	4.0	82.6	0.7	100.0	10.4	87.0	2.5	100.0	1,435
Zanzibar	35.1	9.0	54.4	1.6	100.0	5.9	94.1	0.0	100.0	50
Pemba	27.1	15.4	56.6	0.9	100.0	7.0	93.0	0.0	100.0	24
Unguja	42.5	3.0	52.4	2.2	100.0	4.9	95.1	0.0	100.0	26
Total	20.7	4.2	74.3	0.8	100.0	10.2	85.5	4.3	100.0	1,886

Twelve percent of children under five were reported to have had diarrhoea (Table 8.15). As with ARI and fever, children age 6 to 23 months were more likely to suffer from diarrhoea; prevalence is 2 to 3 times higher among these children than among the very young or older children.

Treatment of diarrhoea is another issue that was studied in the 1999 TRCHS. The goal was to understand diarrhoea management by mothers of children under five. The administration of oral rehydration therapy (ORT) is a simple means of countering the effects of the dehydration that accompanies diarrhoea. ORT involves giving the child a solution prepared by mixing water with commercially prepared packets of oral rehydration salts (ORS) or any kind of thin, nutritious fluids such as rice water, coconut milk, or watery soup.

Table 8.15 Prevalence of diarrhoea

Percentage of children under five years of age with diarrhoea during the two weeks preceding the survey, by selected background characteristics, Tanzania 1999

Background characteristic	Diarrhoea in the preceding 2 weeks	Number of children
Child's age		
< 6 months	10.1	326
6-11 months	30.3	310
12-23 months	20.4	593
24-35 months	11.4	588
36-47 months	4.1	528
48-59 months	3.9	554
Child's sex		
Male	13.5	1,463
Female	11.1	1,436
Birth order		
1	12.2	655
2-3	11.9	974
4-5	13.3	642
6+	12.3	628
Residence		
Urban	9.8	546
Rural	12.9	2,353
Mainland/Zanzibar		
Mainland	12.4	2,820
Urban	9.9	523
Rural	12.9	2,297
Zanzibar	11.6	78
Pemba	16.3	38
Unguja	7.2	40
Mother's education		
No education	8.9	807
Primary incomplete	14.4	476
Primary complete	13.9	1,506
Secondary+	7.3	108
Total	12.4	2,898

Table 8.16 shows diarrhoea treatment practices for children who had diarrhoea in the two weeks preceding the survey. About two-thirds (63 percent) were taken to a health facility for treatment, while 55 percent were given a solution prepared from ORS packets and 32 percent were given more than the usual amount of fluids. Three-quarters of children with diarrhoea were given soup, *uji* (porridge), rice water, or coconut milk. However, almost one-third of ill children were given neither ORS nor increased fluids. Differences in diarrhoea treatment by background characteristics are surprisingly small and should be viewed cautiously, given the small numbers of ill children.

Besides being asked about what was done to treat children with diarrhoea, mothers were specifically asked whether they gave the child more or less fluids and food than usual. Table 8.17 provides information on feeding practices among children under five who had diarrhoea in the two weeks before the survey. The data indicate that 33 percent of children with diarrhoea were given the same amount of fluids as usual, 32 percent received more fluids than usual, and 34 percent received less fluids than usual. These results suggest that one-third of mothers still engage in the dangerous practice of curtailing fluid intake when their children have diarrhoea. Half of the children with diarrhoea were given less than the usual amount of food, which could exacerbate the child's illness.

8.9 KNOWLEDGE OF SIGNS OF ILLNESS

In order to ensure the proper management of childhood illness, it is important for caretakers of children to be aware of the signs of a serious problem that would alert them to the child's need for help. In the TRCHS, all women with children under five were asked what signs of illness would tell them that they should take the child to a health facility immediately. As shown in Table 8.18, almost three out of four mothers could cite two or more danger signs. The most widely cited sign of serious illness was fever, reported by 91 percent of mothers. Other signs of serious illness were the child becoming sicker (46 percent of mothers), the child breathing rapidly (20 percent), and the child drinking poorly (18 percent).

In a similar line of questioning, all women were asked what signs would indicate that a pregnant woman may have a serious health problem for which she should seek medical treatment immediately. Table 8.19 shows that more than half the women know that fever can be a sign of pregnancy complications, and one-third of the women say that profuse bleeding is a sign that a

Table 8.16 Treatment of diarrhoea

Among children under five years who had diarrhoea in the two weeks preceding the survey, the percentage taken for treatment to a health facility or provider, the percentage who received oral rehydration salts (ORS), or increased fluids, the percentage who received neither ORS nor increased fluids, and the percentage given other treatments, according to selected background characteristics, Tanzania 1999

Background characteristic	Percentage taken to a health facility or provider[1]	ORS packets	Increased fluids	Neither ORS or increased fluids	Soup, rice water or coconut milk	Don't know	Children with diarrhoea
Child's age							
< 6 months	(62.5)	(57.8)	(11.3)	(36.9)	(35.9)	(22.3)	33
6-11 months	65.7	63.8	26.6	26.3	74.9	7.5	94
12-23 months	58.2	49.5	33.8	32.7	77.7	12.5	121
24-35 months	62.4	54.6	47.2	28.1	78.2	5.7	67
36-47 months	*	*	*	*	*	*	22
48-59 months	*	*	*	*	*	*	21
Child's sex							
Male	63.5	55.2	34.0	30.9	71.0	10.8	198
Female	62.9	54.4	29.3	33.8	76.5	10.2	160
Birth order							
1	70.8	51.9	26.0	40.4	64.5	16.7	80
2-3	52.4	46.5	33.1	37.0	80.5	11.1	116
4-5	65.5	61.3	42.2	24.2	68.3	7.6	85
6+	69.2	63.4	24.8	25.2	77.9	6.5	77
Residence							
Urban	70.1	51.0	28.9	35.0	85.7	8.3	54
Rural	62.0	55.5	32.4	31.7	71.3	10.9	304
Mainland/Zanzibar							
Mainland	63.6	55.5	31.7	31.9	74.0	10.2	349
Urban	70.6	52.1	28.6	34.3	86.8	7.9	52
Rural	62.4	56.1	32.2	31.5	71.7	10.7	297
Zanzibar	47.7	29.4	40.2	42.0	54.2	21.2	9
Mother's education							
No education	59.5	61.4	17.6	34.5	65.9	11.7	72
Primary incomplete	71.6	57.8	33.4	32.5	72.5	15.4	69
Primary complete	61.8	51.8	36.1	31.3	76.3	8.6	209
Secondary+	*	*	*	*	*	*	8
Total	63.2	54.9	31.9	32.2	73.5	10.5	358

Note: Figures in parentheses are based on 25 to 49 children who had diarrhoea. An asterisk indicates that a figure has been suppressed because it is based on fewer than 25 respondents.
[1] Includes health centre, hospital and private doctor.

pregnant woman should seek medical assistance. Only 17 percent of women know that swollen hands or feet is a potential warning sign (a symptom of oedema). Thirty-seven percent of women cited other symptoms of pregnancy complications, whereas 20 percent said they did not know of any signs.

In interpreting the data, it is useful to keep in mind that all women were asked the question and that knowledge is higher among women who have ever given birth or were pregnant at the time of the survey. For this reason, knowledge of signs of pregnancy complications is relatively lower for the youngest age group of women.

Table 8.17 Feeding practices during diarrhoea

Percent distribution of children under five years who had diarrhoea in the past two weeks by amount of solid foods given and amount of fluids given, Tanzania 1999

Feeding practice	Percentage of children
Amount of fluids given	
Same	33.0
More	31.9
Less	34.4
Don't know/missing	0.7
Amount of food given	
Same	32.5
More	15.8
Less	51.0
Don't know/missing	0.7
Total	100.0
Number of children	358

Table 8.18 Knowledge of health complications

Percentage of mothers of children under five who know a sign indicating the need to seek health care immediately and percentage who know at least two signs, by specific sign and selected background characteristics, Tanzania 1999

Background characteristic	Sign indicating need to seek health care immediately: Drinks poorly	Becomes sicker	Develops a fever	Has rapid breathing	Has difficult breathing	Has blood in stool	Knows at least 2 signs	Number of mothers
Residence								
Urban	23.8	40.1	95.9	22.4	13.3	11.5	77.2	475
Rural	16.2	47.4	88.9	19.8	12.6	8.3	70.2	1,581
Mainland/Zanzibar								
Mainland	18.2	45.6	90.3	20.5	12.9	9.2	71.9	2,006
Urban	24.2	39.7	95.9	22.7	13.6	11.7	77.4	460
Rural	16.5	47.4	88.7	19.8	12.7	8.4	70.3	1,547
Zanzibar	7.1	49.3	96.6	16.1	7.7	4.9	67.5	50
Pemba	4.5	43.0	96.0	20.4	7.9	6.2	64.0	23
Unguja	9.3	54.8	97.2	12.3	7.5	3.8	70.5	27
Mother's education								
No education	14.3	39.5	83.0	17.3	12.1	7.6	60.5	549
Primary incomplete	20.0	45.0	93.3	18.9	9.4	6.2	70.8	343
Primary complete	18.3	49.5	93.4	22.6	13.9	10.7	77.8	1,080
Secondary+	30.4	40.5	90.0	17.9	15.7	9.7	73.2	84
Total	18.0	45.7	90.5	20.4	12.8	9.1	71.8	2,056

Table 8.19 Knowledge of pregnancy complications

Percentage of all women 15-49 who know specific signs of pregnancy complications, by background characteristics, Tanzania 1999

Background characteristic	Sign of pregnancy complications				Doesn't know any signs	Number of births
	Fever	Swollen hands/ feet	Bleeding too much	Other		
Age						
15-19	35.5	5.1	13.4	19.8	49.6	909
20-24	54.2	16.2	31.1	37.4	19.9	811
25-29	58.1	22.3	38.6	43.9	10.2	749
30-34	53.5	20.3	38.8	42.6	9.4	490
35-39	55.9	20.7	46.7	48.6	4.2	456
40-44	61.2	26.5	42.9	44.8	5.0	299
45-49	56.6	26.3	42.9	39.6	9.2	315
Residence						
Urban	51.6	27.1	42.7	38.2	17.4	1,122
Rural	51.5	13.6	29.3	36.9	20.7	2,907
Mainland/Zanzibar						
Mainland	51.8	17.3	33.0	37.3	19.9	3,929
Urban	51.9	27.0	42.8	38.2	17.6	1,088
Rural	51.7	13.5	29.2	36.9	20.9	2,841
Zanzibar	41.1	22.8	34.6	35.5	15.0	100
Pemba	42.9	17.6	29.7	35.4	12.7	44
Unguja	39.7	26.8	38.3	35.6	16.8	56
Mother's education						
No education	52.9	11.8	29.5	36.2	18.3	1,093
Primary incomplete	48.9	11.5	28.7	35.9	25.8	854
Primary complete	52.6	21.7	35.0	37.9	18.5	1,866
Secondary+	46.1	32.3	51.4	42.8	15.3	215
Reproductive status						
Ever had birth	58.0	21.4	39.7	43.9	8.5	3,013
Never had birth	32.2	5.5	13.2	17.4	53.5	1,016
Currently pregnant	57.3	10.5	30.2	45.4	13.1	378
Total	51.5	17.4	33.0	37.2	19.8	4,029

INFANT FEEDING AND CHILDHOOD NUTRITION 9

This chapter covers several related topics: infant feeding (including breastfeeding patterns and introduction of complementary weaning foods), nutritional status of young children and their mothers, and coverage of the vitamin A supplementation programme. Height and weight measurements of the respondents' children under the age of five years and those of the mothers were taken to determine their nutritional status.

9.1 BREASTFEEDING AND SUPPLEMENTATION

Infant feeding has an effect on both the child and the mother. Feeding practices are important determinants of children's nutritional status, and many studies have shown the beneficial effects of breastfeeding on the nutritional status, morbidity, and mortality of young infants. Exclusive breastfeeding (i.e., only breast milk) is recommended during the first 4-6 months of a child's life because it limits exposure to disease agents and provides all of the nutrients a baby requires. Breastfeeding also has an indirect effect on the postpartum fecundity of mothers. In particular, more frequent breastfeeding is associated with longer periods of postpartum amenorrhoea, which in turn is related to longer birth intervals, and thus lower fertility levels.

Prevalence of Breastfeeding

Survey results show that breastfeeding is almost universal in Tanzania. Ninety-five percent of children are breastfed for some period, regardless of the background characteristics of the child or the mother (data not shown). Previous research confirms the universality of breastfeeding in Tanzania (Bureau of Statistics and Macro International, 1997:124).

Timing of Introduction of Complementary Foods

The timing of introduction of complementary foods in addition to breast milk has important implications for the child and the mother. Breast milk is uncontaminated and contains all the nutrients needed by children in the first few months of life. It also provides some immunity to disease through the mother's antibodies. Early supplementation, especially under unhygienic conditions, can result in infection with foreign organisms and lower immunity to disease. The timing of introduction of food supplements also has an effect on the length of the mother's postpartum amenorrhoea. Early initiation of supplementation results in earlier resumption of the mother's menstrual periods, because supplementation reduces infants' dependence on breast milk and the frequency of suckling.

Mothers were asked about the current breastfeeding status of their children under age five and, if the child was being breastfed, whether various types of liquid or solid foods had been given to the child "yesterday" or "last night". Children who are *exclusively* breastfed are defined as receiving breast milk only, while *full* breastfeeding is defined as receiving breast milk and plain water only.

The results shown in Table 9.1 indicate that babies are breastfed for a long time; even among children 12-13 months old, 94 percent are still receiving breast milk (6 percent are weaned).

However, the data indicate that supplementation of breast milk with other liquids and foods begins early in Tanzania. Among newborns less than two months of age, most are either exclusively breastfed (58 percent) or fully breastfed (23 percent); however, almost 20 percent of these very young babies are already receiving complementary foods or liquids. Among those age 2-3 months, almost half are being given supplements.

Table 9.1 Breastfeeding status

Percent distribution of living children under three years of age by current breastfeeding status, according to child's current age in months, Tanzania 1999

Age in months	Not breast-feeding	Exclusively breastfed	Breastfeeding and: Plain water only	Breastfeeding and: Complementary foods	Total	Using bottle with a nipple	Number of living children
0-1	1.1	57.8	22.6	18.5	100.0	3.6	97
2-3	3.0	25.4	24.0	47.6	100.0	8.9	123
4-5	3.0	15.5	11.2	70.3	100.0	14.2	106
6-7	1.9	1.5	5.5	91.0	100.0	10.5	108
8-9	3.6	2.9	4.5	89.0	100.0	9.3	101
10-11	4.9	0.0	5.1	90.1	100.0	4.0	100
12-13	6.4	0.0	5.0	88.6	100.0	7.1	72
14-15	14.9	0.0	0.4	84.8	100.0	6.2	129
16-17	13.8	0.0	1.2	85.0	100.0	2.7	102
18-19	19.2	0.0	0.0	80.8	100.0	4.5	101
20-21	37.8	0.0	0.0	62.2	100.0	1.6	87
22-23	64.1	0.0	0.0	35.9	100.0	3.0	102
24-25	72.8	0.0	0.0	27.2	100.0	5.5	92
26-27	78.7	0.0	1.2	20.1	100.0	6.1	103
28-29	82.1	0.0	0.0	17.9	100.0	4.4	97
30-31	91.9	0.0	0.0	8.1	100.0	10.5	110
32-33	94.5	0.0	0.0	5.5	100.0	1.2	109
34-35	92.8	0.0	0.0	7.2	100.0	4.9	78
0-3 months	2.2	39.6	23.4	34.8	100.0	6.6	220
4-6 months	2.7	11.0	9.6	76.6	100.0	9.3	164
7-9 months	3.0	1.9	4.4	90.7	100.0	13.6	152

Note: Breastfeeding status refers to 24 hours preceding the survey. Children classified as *breastfeeding and plain water only* receive no complementary foods.

Duration of Breastfeeding

Data on the median duration and frequency of breastfeeding are presented in Table 9.2. The estimates of mean and median duration of breastfeeding are based on current status data, that is, the proportion of children under three who were being breastfed at the time of the survey, as opposed to retrospective data on the length of breastfeeding of older children who are no longer breastfed. The prevalence/incidence mean is also provided for possible comparison with other data sources.

Table 9.2 Median duration and frequency of breastfeeding

Median duration (months) of any breastfeeding, exclusive breastfeeding, and full breastfeeding among children under three years of age, and the percentage of children under six months of age who were breastfed six or more times in the 24 hours preceding the interview, according to background characteristics, Tanzania 1999

Background characteristic	Median duration of breastfeeding among children under 3 years[1]				Children under six months	
	Any breast-feeding	Exclusive breast-feeding	Full breast-feeding[2]	Number of children	Breasftfed 6 or more times in preceding 24 hours	Number of children
Child's sex						
Male	21.2	0.7	2.0	1,038	92.2	161
Female	20.3	1.7	3.1	990	96.8	165
Residence						
Urban	19.4	0.7	2.3	388	98.8	59
Rural	21.4	1.3	2.4	1,641	93.6	267
Mainland/Zanzibar						
Mainland	20.9	1.2	2.4	1,978	94.4	317
Urban	19.4	0.7	2.3	374	98.9	56
Rural	21.4	1.3	2.5	1,603	93.5	260
Zanzibar	21.0	0.4	1.8	51	97.0	10
Pemba	21.1	0.4	0.9	25	*	5
Unguja	20.9	0.5	2.0	27	*	5
Mother's education						
No education	21.3	2.1	2.6	546	94.0	103
Primary incomplete	22.8	0.6	1.0	349	94.5	52
Primary complete	20.2	0.8	2.3	1,050	94.7	154
Secondary+	12.2	0.5	4.1	84	*	17
Assistance at delivery						
Health professional	20.4	0.7	2.0	871	93.8	141
Traditional midwife	21.9	0.9	2.2	374	97.2	61
Other or none	21.1	2.0	3.3	783	94.0	124
Total	20.9	1.1	2.4	2,029	94.5	326
Mean[1]	20.4	2.6	4.0	95.5	NA	NA
Prevalence/Incidence mean	19.9	1.9	3.4	NA	NA	NA

Note: An asterisk indicates that a figure has been suppressed because it is based on fewer than 25 respondents. Total includes 24 children under 3 years of age for whom data on assistance at delivery are missing.
NA = Not applicable
[1] Medians and means are based on current status and durations are in months.
[2] Either exclusive breastfeeding or breastfeeding and plain water only.

The median duration of breastfeeding in Tanzania is 21 months, with no major variations by background characteristics. The only exception is that babies whose mothers have some secondary school education are breastfed for shorter durations (median of 12 months) than those whose mothers are less educated (20-22 months). There has been no significant change in the median duration of breastfeeding over time.

The early introduction of supplements is reflected in the short duration of exclusive breastfeeding (median duration of one month). Few children receive only plain water as a supplement to breast milk, and thus the median duration of full breastfeeding is also quite short (two months).

The duration of postpartum amenorrhoea is affected by both the length of time spent breastfeeding and the frequency of breastfeeding. The child's health and nutritional status are also affected by the frequency of breastfeeding. Almost all children under the age of six months (95 percent) were reported to have been breastfed at least six times in the 24 hours preceding the survey. Differences among subgroups are minor.

Table 9.3 is a summary tabulation of various infant feeding indicators. Although experts recommend that babies be exclusively breastfed for 4-6 months after birth, the TRCHS data show that mothers supplement breast milk too early; only 41 percent of infants 0-3 months are exclusively breastfed with no supplementation. Among older infants, lack of supplementation is the problem. Less than two in three children 6-9 months are receiving other liquids and mushy food in addition to breast milk. Somewhat more encouraging is the fact that breastfeeding durations are long in Tanzania, with 88 percent of children 12-15 months still being breastfed and almost half of those still receiving breast milk at 20-23 months of age.

Table 9.3 Infant feeding indicators

Percentage of children with specific feeding indicators, by breastfeeding status, age, and selected background characteristics, Tanzania 1999

Background characteristic	Children 0-3 months		Children 6-9 months		Children 12-15 months		Children 20-23 months	
	Percent exclusively breastfed	Number of children	Percent receiving solid/mushy food	Number of children	Percent still breastfed	Number of children	Percent still breastfed	Number of children
Sex of chid								
Males	37.6	109	65.3	94	82.3	112	45.7	95
Female	45.2	111	63.2	115	95.5	89	50.2	94
Residence								
Urban	39.8	33	66.3	39	84.3	35	26.4	41
Rural	41.7	187	63.7	171	89.0	166	53.9	148
Mainland/Zanzibar								
Mainland	42.5	213	63.8	203	88.3	196	47.7	184
Urban	42.0	31	65.5	38	84.4	34	25.2	39
Rural	42.5	182	63.4	166	89.1	161	53.7	144
Zanzibar	8.6	7	74.4	6	83.7	5	58.6	5
Education								
No education	42.2	59	48.8	51	81.3	53	43.8	44
Primary incomplete	36.7	41	63.3	30	89.3	32	66.5	37
Primary complete	45.2	106	70.1	124	94.7	108	44.0	104
Secondary+	*	14	*	5	*	9	*	4
Total	41.4	220	64.1	210	88.2	201	48.0	189

Note: An asterisk indicates that a figure has been suppressed because it is based on fewer than 25 respondents.

Table 9.4 Ideal duration of breastfeeding

Percent distribution of all women 15-49 by ideal length of exclusive breastfeeding, according to selected background characteristics, Tanzania 1999

Background characteristic	Ideal length of exclusive breastfeeding					Don't know	Total	Number of women
	0-3 months	4-6 months	7-11 months	12+ months	Other			
Age								
15-19	37.8	38.4	2.1	0.5	0.2	21.0	100.0	909
20-24	38.6	55.1	0.4	1.1	0.1	4.7	100.0	811
25-29	37.7	58.1	1.1	0.9	0.7	1.4	100.0	749
30-34	34.3	61.7	0.5	0.9	0.1	2.6	100.0	490
35-39	39.5	55.7	1.3	1.5	0.8	1.1	100.0	456
40-44	36.8	60.1	0.5	1.1	0.1	1.4	100.0	299
45-49	41.5	53.0	1.1	1.1	1.0	2.3	100.0	315
Residence								
Urban	39.0	55.4	0.3	0.1	0.0	5.2	100.0	1,122
Rural	37.5	52.0	1.4	1.3	0.5	7.3	100.0	2,907
Mainland/Zanzibar								
Mainland	38.0	52.9	1.1	1.0	0.4	6.6	100.0	3,929
Urban	39.2	55.4	0.3	0.1	0.0	5.0	100.0	1,088
Rural	37.6	52.0	1.4	1.3	0.5	7.2	100.0	2,841
Zanzibar	33.8	54.3	0.1	0.0	1.9	9.9	100.0	100
Pemba	31.7	55.3	0.3	0.0	3.9	8.9	100.0	44
Unguja	35.5	53.6	0.0	0.0	0.3	10.7	100.0	56
Education								
No education	37.4	50.8	1.4	1.5	1.1	7.8	100.0	1,093
Primary incomplete	35.0	52.3	1.5	0.9	0.2	10.1	100.0	854
Primary complete	39.0	54.7	0.8	0.7	0.1	4.7	100.0	1,866
Secondary+	42.5	51.5	0.8	0.6	0.0	4.7	100.0	215
Total	37.9	53.0	1.1	1.0	0.4	6.7	100.0	4,029

Because studies show that exclusive breastfeeding provides the optimum nutrition for infants up to six months of age, Tanzania has implemented education programmes to convey this fact to women. In the TRCHS, all women 15-49 were asked how long they thought a mother should breastfeed her baby without giving any food or liquid other than breast milk. The results are shown in Table 9.4. They indicate that more than half of women say the ideal duration of exclusive breastfeeding is four to six months. More than one-third say that exclusive breastfeeding should last less than three months, while 7 percent of women say they do not know. Differences by background characteristics of the woman are generally small, except that teenage girls are less likely to have an opinion than older women.

9.2 Nutritional Status in Early Childhood

In addition to questions about breastfeeding practices, the 1999 TRCHS included an anthropometric component in which all children under five listed in the Household Schedule were weighed and measured. Each interviewing team carried a scale and a measuring board. The scales were lightweight, bathroom-type scales with a digital screen designed and manufactured under the authority of UNICEF. The boards were specially designed for use in field surveys. Children younger

than 24 months were measured lying down on the board (recumbent length), whereas standing height was measured for older children.

Evaluation of nutritional status is based on the rationale that in a well-nourished population, there is a statistically predictable distribution of children of a given age with respect to height and weight. In any large population, there is variation in height and weight; this variation approximates a normal distribution. Use of a standard reference population as a point of comparison facilitates the examination of differences in the anthropometric status of subgroups in a population and of changes in nutritional status over time. The World Health Organisation has recommended the use of the U.S. National Center for Health Statistics (NCHS) reference population.

Nutritional Status Indicators

Three standard indices of physical growth that describe the nutritional status of children are presented:

- Height-for-age (stunting)
- Weight-for-height (wasting)
- Weight-for-age (underweight).

Each of these indices gives different information about growth and body composition that can be used to assess nutritional status.

Height-for-age is a measure of linear growth, and its deficits indicate long-term, cumulative inadequacies of health or nutrition. A child who is below minus two standard deviations (-2 SD) from the median of the NCHS reference population in terms of height-for-age is considered short for his/her age, or *stunted*, a condition reflecting the cumulative effect of chronic malnutrition. If the child is below minus three standard deviations (-3 SD) from the reference median, then the child is considered severely stunted. A child between -2 SD and -3 SD is considered moderately stunted. Stunting reflects failure to receive adequate nutrition over a long period and is frequently associated with poor overall economic conditions, chronic or repeated infections, and inadequate nutrient intake. Height-for-age, therefore, represents a measure of the long-term effects of malnutrition in a population and does not vary appreciably according to the season of data collection. Stunted children are not immediately obvious in a population: a stunted three-year-old child could look like a well-fed two-year-old.

Weight-for-height measures body mass in relation to body length and describes current nutritional status. A child who is below minus two standard deviations (-2 SD) from the reference median for weight-for-height is considered too thin for his/her height, or *wasted*, a condition reflecting acute malnutrition. Wasting indicates a deficit in tissue and fat mass compared with the amount expected in a child of the same height or length and may result either from failure to gain weight or from actual weight loss. Wasting represents the failure to receive adequate nutrition in the period immediately preceding the survey and may be the result of inadequate food intake or recent episodes of illness causing loss of weight and the onset of malnutrition. As with stunting, wasting is considered severe if the child is more than three standard deviations below the reference mean. Severe wasting is closely linked to an elevated risk of mortality. Prevalence of wasting may vary considerably by season.

Weight-for-age is primarily a composite index of both weight-for-height and height-for-age, and its summary nature makes interpretation complex. A child can be underweight for his age because he is stunted, wasted, or both. Weight-for-age is a useful tool in clinical settings for

continuous assessment of nutritional progress and growth. Children whose weight-for-age is below minus two standard deviations from the median of the reference population are classified as *underweight*. In the reference population, only 2.3 percent of children fall below minus two standard deviations (-2 SD) for each of these three indices.

In the survey, all children under age five who were listed on the Household Questionnaire were eligible for height and weight measurement.[1] Of the 2,990 children eligible for measurement, 94 percent were weighed and measured. For 2 percent of the children, data were missing, mostly because the child was not at home. Of the children who were both weighed and measured, a little more than 2 percent were considered to have implausibly low or high values for height-for-age or weight-for-height, while another 1 percent were missing the date of birth information. The following analysis focuses on the 2,820 children under five for whom complete and plausible anthropometric data were collected. Table 9.5 shows the percentage of children who are classified as malnourished according to height-for-age, weight-for-height, and weight-for-age indices, by the child's age and selected background characteristics.

Current Levels of Malnutrition

The height-for-age results suggest that 44 percent of children under five are stunted, with 17 percent being severely stunted. Stunting increases from 9 percent among children less than six months old to more than half of the children 12-59 months old. Rural children are much more likely to be short for their age than urban children (48 versus 26 percent). Stunting seems to be less common among children in Zanzibar than in the Mainland.

The weight-for-height results show that 5 percent of children under five are wasted, with less than 1 percent being severely wasted. Differences in wasting by background characteristics are small except for some fluctuations by age of the child.

The proportion of children classified as underweight for their age is 29 percent. As with stunting, children older than six months of age are much more likely to be underweight than are very young infants. There is a sizeable difference in levels of underweight between urban and rural areas (21 versus 31 percent, respectively).

Figure 9.1 shows the distribution of children by age and the extent to which their weight and height deviate from the median of the reference population for height-for-age, weight-for-height, and weight-for-age indices. The results agree with previous findings of the 1991-92 TDHS and 1996 TDHS. For all three anthropometric indices, there is remarkable deterioration in nutritional status that begins shortly after birth, continues through the first year and a half, and then levels off or improves slightly thereafter to the third birthday.

[1] Note that this procedure is a change from previous surveys in which the children measured were those born in the five years preceding the survey to women who were interviewed individually. The current procedure is considered less biased because children whose mothers have died or who reside in different households from their mothers are not excluded.

Table 9.5 Nutritional status of children

Percentage of children under five years of age who are classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, and mean Z-scores, by selected background characteristics, Tanzania 1999

Background characteristic	Height-for-age			Weight-for-height			Weight-for-age			Number of children
	Percentage below -3 SD	Percentage below -2 SD[1]	Z score	Percentage below -3 SD	Percentage below -2 SD[1]	Z-score	Percentage below -3 SD	Percentage below - 2 SD[1]	Mean Z-score	
Child's age										
<6 months	2.5	9.2	-0.7	0.0	3.3	0.4	0.0	3.9	-0.1	304
6-11 months	5.5	23.2	-1.3	0.4	5.8	-0.2	3.9	21.5	-1.2	303
12-23 months	21.0	50.8	-2.0	1.0	10.0	-0.8	11.8	41.8	-1.7	571
24-35 months	17.3	48.5	-2.0	1.2	5.4	-0.5	9.0	38.2	-1.6	568
36-47 months	23.9	51.9	-2.1	0.4	1.9	-0.2	6.0	26.4	-1.4	527
48-59 months	20.8	54.5	-2.1	0.4	4.7	-0.2	3.9	29.0	-1.4	547
Sex										
Male	16.9	44.9	-1.8	0.1	5.4	-0.3	6.0	28.5	-1.3	1,423
Female	17.3	42.7	-1.8	1.2	5.3	-0.3	7.0	30.4	-1.4	1,397
Residence										
Urban	7.7	26.1	-1.3	0.4	5.9	-0.3	4.9	20.6	-1.0	500
Rural	19.1	47.6	-1.9	0.7	5.3	-0.3	6.8	31.3	-1.4	2,321
Mainland/Zanzibar										
Mainland	17.2	44.0	-1.8	0.6	5.3	-0.3	6.5	29.5	-1.3	2,746
Urban	7.8	26.1	-1.3	0.4	5.9	-0.3	5.0	20.7	-1.0	479
Rural	19.2	47.8	-1.9	0.7	5.2	-0.3	6.8	31.4	-1.4	2,268
Zanzibar	12.2	35.8	-1.6	0.5	6.3	-0.4	7.0	25.8	-1.3	74
Pemba	18.3	46.2	-1.8	0.8	9.5	-0.6	12.7	36.0	-1.6	34
Unguja	7.0	27.0	-1.3	0.3	3.5	-0.3	2.2	17.2	-1.0	40
Total	17.1	43.8	-1.8	0.6	5.4	-0.3	6.5	29.4	-1.3	2,820

Note: Figures are for children born in the period 0-59 months preceding the survey. Each index is expressed in terms of the number of standard deviation (SD) units from the median of the NCHS/CDC/WHO international reference population. Children are classified as malnourished if their Z-scores are below minus two or minus three standard deviations (-2 SD or -3 SD) from the median of the reference population.

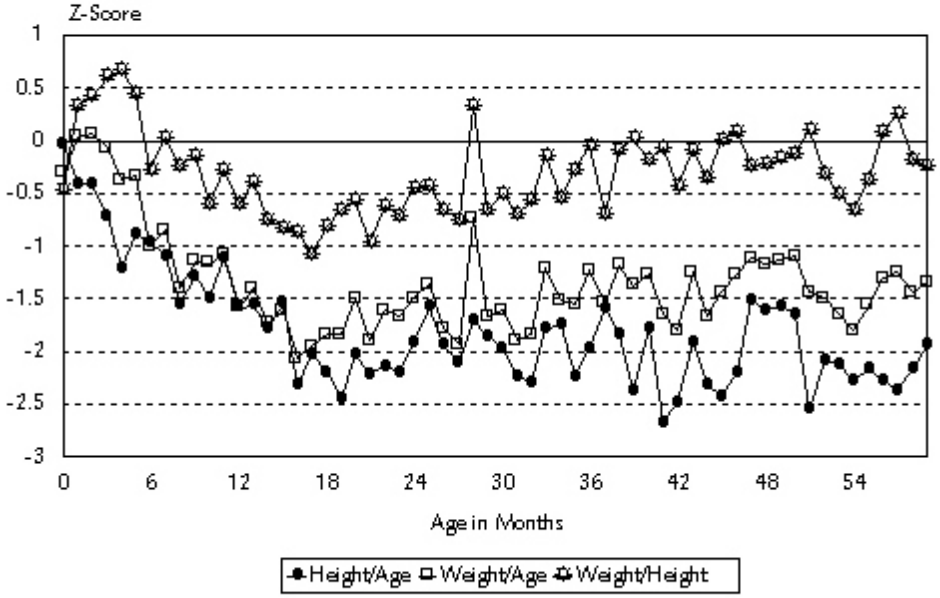
[1] Includes children who are below -3 SD

Trends in Malnutrition in Tanzania

The data collected in the 1999 TDHS to assess nutritional status of children under five years of age are similar to those obtained in the 1991-92 TDHS and the 1996 TDHS, despite the administration of the three surveys in different seasons. The 1991-92 TDHS data collection took place from October 1991 to March 1992, while the 1996 TDHS took place from July to November 1996, and the 1999 TRCHS was conducted from September to mid-November 1999. The difference in timing of the three surveys may affect the results concerning nutritional status of children.

The three surveys show that the prevalence of stunting has remained at around 43-44 percent of children under five (Table 9.6). Although the percentage wasted rose from 6 percent to 7 percent from 1991-92 to 1996, it decreased to 5 percent in 1999. The proportion of children who are underweight has also remained constant at around 29-31 percent.

Figure 9.1 Nutritional Status of Children Under Five Years, Mean Z-scores by Age in Months



TRCHS1999

Table 9.6 Trends in nutritional status of children

Among children under five years of age, the percentage classified as malnourished according to height-for-age, weight-for-height, and weight-for-age, 1991-92 TDHS, 1996 TDHS, and 1999 TRCHS

Index	1991-92 TDHS	1996 TDHS	1999 TRCHS[a]
Height-for-age			
< -2 SD	42.6	43.4	43.8
< -3 SD	16.7	17.8	17.1
Weight-for-height			
< -2 SD	6.0	7.2	5.4
< -3 SD	1.2	1.3	0.6
Weight-for-age			
< -2 SD	28.8	30.6	29.4
< -3 SD	7.1	7.8	6.5
Number of children	6,097	5,344	2,820

Source: Ngallaba et al., 1992: 108; Bureau of Statistics and Macro International, 1997: 131

[a] Based on children under five in the household

9.3 Vitamin A Supplementation among Children

Research has shown that adequate stores of vitamin A can have an enormous effect on the ability to fight diseases and maintain good health. In the absence of sufficient intake of foods rich in vitamin A, due to poor soils and/or cultural habits, health programmes often implement mass vitamin A supplementation programmes, especially for children age six months to five years of age.

In order to measure the level of coverage of the vitamin A supplementation programme in Tanzania, women were asked if their children under age five had ever been given a vitamin A supplement and, if so, when they received the most recent dose. In order to minimise confusion with other supplements and, vaccines (e.g., polio vaccine, which is usually also given orally), interviewers were instructed to show the respondent a sample small, reddish vitamin A capsule. Unfortunately, they were not equipped with the blue vitamin A capsule that is distributed as part of the Expanded Programme on Immunisation (EPI). Consequently, the figures given here may underrepresent the level of vitamin A supplementation.

The data in Table 9.7 indicate that only 14 percent of children 6-59 months were reported to have received a vitamin A supplement in the previous six months. Another 6 percent received a supplement but not in the previous six months. Coverage is remarkably higher among children in Unguja than in other parts of the country. It is also higher among children of better-educated mothers.

Table 9.7 Vitamin A supplementation among children

Percent distribution of children age 6-59 months by whether they received a high-dose vitamin A supplement in the six months preceding the survey, according to selected background characteristics, Tanzania 1999

Background characteristic	Received vitamin A supplement			Not sure if received vitamin A	Never received vitamin A	Total	Number of children
	Within last 6 months	Prior to last 6 months	Not sure when				
Child's sex							
Male	12.2	6.1	0.2	2.2	79.3	100.0	1,301
Female	15.5	6.6	0.2	1.3	76.4	100.0	1,271
Residence							
Urban	17.8	9.1	0.5	2.2	70.4	100.0	487
Rural	12.9	5.7	0.1	1.7	79.6	100.0	2,085
Mainland/Zanzibar							
Mainland	13.3	6.5	0.2	1.8	78.3	100.0	2,503
Urban	16.1	9.4	0.5	2.1	71.8	100.0	467
Rural	12.6	5.8	0.1	1.7	79.8	100.0	2,036
Zanzibar	33.8	0.7	0.0	3.0	62.5	100.0	69
Pemba	13.1	0.8	0.0	0.7	85.5	100.0	33
Unguja	53.1	0.6	0.0	5.1	41.2	100.0	36
Child's age							
6-11 months	17.0	1.2	0.0	0.5	81.3	100.0	310
12-23 months	20.8	5.2	0.4	1.2	72.4	100.0	593
24-35 months	13.8	10.5	0.0	0.5	75.2	100.0	588
36-47 months	9.7	5.3	0.0	3.1	82.0	100.0	528
48-59 months	8.5	7.0	0.5	3.3	80.7	100.0	554
Education							
No education	6.6	4.1	0.3	2.2	86.8	100.0	705
Primary incomplete	16.5	4.3	0.0	1.0	78.2	100.0	424
Primary complete	15.2	8.0	0.2	1.9	74.8	100.0	1,353
Secondary+	37.2	8.5	0.0	1.5	52.8	100.0	91
Total	13.8	6.3	0.2	1.8	77.9	100.0	2,572

KNOWLEDGE OF AIDS 10

10.1 INTRODUCTION

AIDS and HIV infection have been identified as serious health and socioeconomic problems in Tanzania. The AIDS virus was probably introduced to the country in the early 1980s. Since then, the number of cases has continued to rise, and by 1986, all regions of the country had reported AIDS cases. Because of its fast spread, the control of AIDS has become a top government priority, and the government established the National AIDS Control Programme (NACP) under the Ministry of Health as the focal point for its programmes.

The NACP estimates that a total of 8,675 AIDS cases were reported in Tanzania, bringing the cumulative number of AIDS cases to 109,863. The NACP, however, estimates a total of 43,375 new AIDS cases to have occurred in 1998 alone and a cumulative total of 549,315 cases based on the estimate that only one out of five cases are reported.

The 1999 TRCHS included questions on AIDS to assess the knowledge and attitudes of respondents regarding transmission mechanisms and prevention of infection with the AIDS virus. Female and male respondents were asked whether they had heard of AIDS and, if so, they were asked to name modes of transmission of the AIDS virus. They were asked whether they thought it was possible to prevent AIDS and, if so, how and whether they thought they had a high or low risk of becoming infected with the disease.

10.2 KNOWLEDGE OF AIDS TRANSMISSION

As shown in Table 10.1, all but a tiny fraction of adult women and men in Tanzania have heard of AIDS. There are no significant differences in level of knowledge by sex of respondent or by background characteristics. The level of knowledge of HIV/AIDS has not changed since 1996 (Bureau of Statistics and Macro International, 1997:147, 148).

To ascertain the depth of knowledge about AIDS, respondents were asked whether a person can do something to avoid getting AIDS and, if so, what. Tables 10.2.1 and 10.2.2 show the percentage of women and men who spontaneously mentioned specific ways to avoid AIDS.

It is encouraging that only 6 percent of women and 4 percent of men say that there is no way to avoid getting the virus. This low level of misinformation means that education programmes are getting the message out that AIDS can be prevented. It is also encouraging to note that the percentage who say there is no way to avoid AIDS has declined since 1996, from 12 to 6 percent of women and from 10 to 4 percent of men (Bureau of Statistics and Macro International, 1997: 150, 151).

As for the means of transmission, more than half of women and almost three-quarters of men spontaneously mentioned condom use as a means of prevention. Almost half of women and men mentioned that having only one sexual partner helps to prevent getting the AIDS virus. Other means of prevention that are cited by sizeable proportions of both women and men are abstention, limiting the number of partners, and avoiding injections. Differentials in knowledge of prevention measures are not large, except that mention of condom use varies by urban-rural residence, Mainland/Zanzibar, and education.

Knowledge about ways to avoid HIV/AIDS has increased significantly since 1996. For example, in 1996, only 39 percent of women cited condom use as a means of prevention. By 1999, this proportion had increased to 56 percent. The proportion of men who cited condom use increased from 55 to 71 percent. Similarly, the proportion of women who said that abstaining from sex and having only one partner were ways to prevent HIV/AIDS almost doubled between 1996 and 1999 (from 15 to 28 percent for abstaining and from 25 to 47 percent for having only one partner).

Table 10.1 Knowledge of HIV/AIDS

Percentage of women and men who have heard of HIV/AIDS, by background characteristics, Tanzania 1999

Background characteristic	Women		Men	
	Has heard of HIV/AIDS	Number of women	Has heard of HIV/AIDS	Number of men
Age				
15-19	95.2	909	96.7	790
20-24	97.4	811	99.8	540
25-29	97.6	749	100.0	546
30-39	98.2	946	100.0	817
40-49	96.6	614	99.0	478
50-59	NA	NA	99.8	371
Marital status				
Currently married	97.1	2,653	99.7	2,063
Formerly in union	96.5	433	99.9	190
Never married	96.8	943	97.9	1,289
Residence				
Urban	99.8	1,122	99.9	941
Rural	95.9	2,907	98.8	2,601
Mainland/Zanzibar				
Mainland	96.9	3,929	99.1	3,452
Urban	99.8	1,088	99.9	909
Rural	95.8	2,841	98.8	2,543
Zanzibar	98.9	100	99.2	90
Pemba	98.7	44	99.5	36
Unguja	99.1	56	98.9	55
Education				
No education	91.1	1,093	95.9	495
Primary incomplete	98.4	854	98.9	1,000
Primary complete	99.4	1,866	99.9	1,791
Secondary+	100.0	215	100.0	256
Total	97.0	4,029	99.1	3,542

NA = Not applicable

After asking an open-ended question about ways of prevention, interviewers followed up by asking specific questions about common ways of AIDS prevention, as well as a number of common misconceptions about how the virus is spread. On the basis of the answers to these "prompted" questions, knowledge of preventive measures is even higher (Table 10.3). For example, only 28 percent of women spontaneously mentioned abstinence as a means of preventing AIDS; however, when asked if it is possible to avoid AIDS by abstaining from sex completely, a majority of all female respondents (71 percent) answered affirmatively. Almost as many women know that having one faithful partner is a way of protecting against the risk of getting AIDS. Eighty percent of women know of at least one of the three methods of protecting against AIDS, and almost half know all three methods.

Not only is it important to know about effective ways to avoid AIDS, but it is also useful to be able to identify incorrect ways of avoiding the virus. Common misconceptions about how AIDS spreads are that it can be contracted by sharing food with someone who is infected or that it can be transmitted by mosquitos. A third common misunderstanding is that people who are infected will show signs of illness.

Table 10.2.1 Knowledge of specific ways to avoid HIV/AIDS: women

Percentage of women who know of specific ways to avoid HIV/AIDS, and percentage with misinformation, by background characteristics, Tanzania 1999

Background characteristic	Ways to avoid HIV/AIDS												
	There is no way to avoid HIV/AIDS	Abstain from sex	Use condoms	Have only one sex partner	Limit number of partners	Avoid sex with prostitutes	Avoid sex with homosexuals	Avoid transfusions	Avoid injections	Don't share razors	Doesn't know specific way	Percent with misinformation[1]	Number of women
Age													
15-19	7.9	31.5	41.2	34.1	13.3	7.0	0.1	3.2	12.1	11.9	21.8	1.4	909
20-24	5.6	27.6	64.6	44.9	18.2	5.0	0.1	2.3	9.3	9.4	12.9	1.2	811
25-29	4.9	24.8	66.7	54.0	21.5	6.7	0.1	3.8	11.6	9.5	10.1	1.3	749
30-39	4.8	26.3	62.3	52.6	22.6	6.5	0.0	3.4	10.0	6.9	11.2	2.6	946
40-49	7.8	31.3	41.6	50.0	21.5	4.9	0.7	3.9	9.7	7.3	20.4	1.6	614
Marital status													
Currently married	6.3	23.8	57.7	50.7	21.3	5.8	0.2	3.0	9.3	7.4	14.3	1.5	2,653
Formerly in union	4.8	36.8	62.6	41.5	18.3	6.2	0.1	1.7	13.0	8.4	13.4	1.4	433
Never married	6.1	36.6	46.8	38.1	13.9	6.8	0.2	4.7	13.1	14.0	18.5	2.2	943
Residence													
Urban	2.1	35.4	73.0	56.8	20.8	6.1	0.2	4.5	13.7	9.3	7.6	2.2	1,122
Rural	7.7	25.4	48.9	42.9	18.6	6.1	0.1	2.8	9.4	9.0	18.1	1.5	2,907
Mainland/Zanzibar													
Mainland	6.2	28.5	56.3	46.7	19.0	6.1	0.2	3.3	10.6	9.2	15.2	1.6	3,929
Urban	2.1	36.0	73.9	56.8	20.4	6.3	0.3	4.5	13.8	9.4	7.7	2.2	1,088
Rural	7.7	25.6	49.5	42.9	18.5	6.1	0.1	2.8	9.4	9.1	18.1	1.4	2,841
Zanzibar	4.0	17.8	31.5	46.5	27.1	3.8	0.2	2.2	9.1	5.0	12.4	2.8	100
Pemba	7.8	15.7	17.6	33.5	20.4	4.4	0.2	1.9	9.9	6.2	19.3	5.2	44
Unguja	1.1	19.4	42.3	56.6	32.4	3.4	0.2	2.5	8.5	4.2	6.9	0.9	56
Education													
No education	10.2	25.2	31.5	37.7	15.8	5.7	0.4	1.0	5.3	5.8	25.4	1.1	1,093
Primary incomplete	6.4	28.9	54.6	44.7	15.9	5.9	0.0	3.7	10.8	10.1	17.7	1.1	854
Primary complete	4.2	28.3	67.7	51.9	21.7	6.4	0.0	3.7	12.8	9.4	9.5	1.9	1,866
Secondary+	0.6	39.2	78.1	56.3	28.3	6.2	1.3	9.5	17.4	18.8	1.7	5.0	215
Total	6.1	28.2	55.6	46.7	19.2	6.1	0.2	3.3	10.6	9.1	15.2	1.7	4,029

[1] Includes avoiding kissing and mosquito bites, seeking protection from traditional healer, and other types of misinformation.

In the TRCHS, women were asked whether these misconceptions were true. As shown in Table 10.4, most women know that sharing food is not a valid means of transmitting the virus. More than half also say that AIDS cannot be transmitted by mosquito bites. Finally, 69 percent of women know that it is possible for a healthy-looking person to be infected with the AIDS virus. Although 83 percent of women can correctly identify at least one of these misconceptions, only one-third can identify all three. Fourteen percent are not aware of any.

Tables 10.5.1 and 10.5.2 present data on whether women and men are aware that it can be transmitted from mother to child. Around 80 percent of women and men recognise this mode of transmission. The data also indicate that 63 percent of women and 68 percent of men know someone who either has AIDS or has died from AIDS. This proportion has increased substantially since 1996, when only 48 percent of women and 52 percent of men said they knew someone with AIDS.

Table 10.2.2 Knowledge of specific ways to avoid HIV/AIDS: men

Percentage of men who know of specific ways to avoid HIV/AIDS, and percentage with misinformation, by background characteristics, Tanzania 1999

Background characteristic	Ways to avoid HIV/AIDS: There is no way to avoid HIV/AIDS	Abstain from sex	Use condoms	Have only one sex partner	Limit number of partners	Avoid sex with prostitutes	Avoid sex with homosexuals	Avoid transfusions	Avoid injections	Don't share razors	Doesn't know specific way	Percent with misinformation[1]	Number of men
Age													
15-19	7.5	28.8	57.7	28.3	9.5	5.8	0.6	3.2	9.0	10.6	21.3	2.4	790
20-24	2.6	31.9	83.7	42.7	15.8	6.1	0.0	5.0	9.3	11.8	6.9	1.9	540
25-29	2.8	26.1	84.4	55.9	18.5	10.1	0.4	5.0	11.7	10.5	5.2	1.2	546
30-39	1.6	33.5	77.9	58.3	21.1	6.6	0.8	7.8	14.7	17.6	5.6	2.1	817
40-49	4.4	30.7	64.1	51.1	19.7	7.8	0.8	5.4	9.2	9.2	8.8	2.8	478
50-59	4.6	33.7	57.5	57.4	19.1	10.4	0.1	2.1	5.5	7.7	7.3	2.2	371
Marital status													
Currently married	3.4	29.8	73.7	55.4	20.3	8.1	0.6	4.8	10.8	12.2	6.4	2.0	2,063
Formerly in union	2.4	41.4	75.2	46.1	12.4	4.4	0.7	4.7	10.4	10.0	9.2	1.4	190
Never married	5.0	30.6	66.8	35.9	12.1	6.8	0.3	5.4	9.8	11.6	15.4	2.4	1,289
Residence													
Urban	2.2	38.8	82.3	55.0	18.9	7.6	1.3	7.1	10.4	10.0	5.5	2.2	941
Rural	4.6	27.8	67.3	45.2	16.2	7.4	0.2	4.2	10.4	12.5	11.4	2.1	2,601
Mainland/Zanzibar													
Mainland	4.0	30.7	72.0	48.0	16.8	7.4	0.5	5.1	10.4	12.0	9.9	2.1	3,452
Urban	2.3	39.3	83.3	55.4	18.6	7.5	1.3	7.3	10.4	10.1	5.6	2.2	909
Rural	4.6	27.7	67.9	45.4	16.2	7.3	0.2	4.3	10.5	12.7	11.4	2.1	2,543
Zanzibar	2.9	30.2	44.3	37.8	19.8	10.2	0.4	2.7	9.6	7.1	7.9	1.7	90
Pemba	4.0	40.8	35.1	25.9	14.4	5.1	0.0	3.7	12.9	9.2	8.2	2.8	36
Unguja	2.1	23.3	50.4	45.5	23.4	13.5	0.6	2.1	7.4	5.7	7.6	1.0	55
Education													
No education	7.2	27.5	49.3	42.3	9.6	6.4	0.3	0.7	2.3	2.9	17.9	1.5	495
Primary incomplete	4.6	29.2	63.8	39.5	15.1	7.4	0.0	3.4	9.0	8.6	12.7	2.5	1,000
Primary complete	3.0	31.0	80.4	51.8	18.1	8.0	0.6	6.3	11.6	14.3	7.0	1.8	1,791
Secondary+	1.7	41.1	79.4	62.6	29.9	6.1	2.3	10.3	23.6	25.2	2.7	3.6	256
Total	3.9	30.7	71.3	47.8	16.9	7.4	0.5	5.0	10.4	11.9	9.8	2.1	3,542

[1] Includes avoiding kissing and mosquito bites, seeking protection from traditional healer, and other types of misinformation.

Table 10.6 shows more details about women's knowledge of mother-child transmission of AIDS. Three-quarters of all women age 15-49 say that AIDS can be passed from mother to child during pregnancy, while 70 percent say it can be transferred to the child through breast milk, and 61 percent say the baby can be infected during delivery. More than half of women say that all three modes of transmission exist.

10.3 Perceptions of Personal Risk of Getting AIDS

In the TRCHS, respondents who had heard of AIDS were asked what they thought their chances of getting the disease were. The majority of women and men said they felt they had either no risk or a small risk of getting AIDS (Table 10.7). However, about one-quarter of both sexes said they had a moderate or great risk of getting the disease. Differences in risk assessment are not large; however, young respondents, those who have not married, and those in Zanzibar are more likely to say they have no risk of getting AIDS.

Table 10.3 Knowledge (prompted) of the main ways to avoid HIV/AIDS

Percentage of women age 15-49 who know the main ways of preventing HIV transmission, by background characteristics, Tanzania 1999

Background characteristic	Has heard of HIV/AIDS	Main ways to avoid HIV/AIDS: Have only one partner	Always use condom	Abstain from sex	Knows all three ways	Knows at least one way	Doesn't know any way	Number of women
Age								
15-19	95.2	56.3	52.7	62.4	37.8	71.1	24.0	909
20-24	97.4	73.1	72.3	68.9	54.0	82.4	14.9	811
25-29	97.6	74.2	76.7	76.4	58.4	86.7	10.9	749
30-34	97.8	73.9	72.3	79.2	55.8	86.5	11.2	490
35-39	98.7	71.7	71.5	75.3	54.2	86.0	12.7	456
40-44	100.0	70.5	60.6	68.8	44.9	81.7	18.3	299
45-49	93.3	60.5	45.4	65.1	37.2	69.3	24.1	315
Residence								
Urban	99.8	77.8	79.7	76.5	59.3	90.3	9.5	1,122
Rural	95.9	64.6	60.2	68.2	45.6	76.7	19.2	2,907
Mainland/Zanzibar								
Mainland	96.9	68.0	65.8	70.4	49.4	80.4	16.6	3,929
Urban	99.8	77.4	80.0	76.3	59.2	90.2	9.6	1,088
Rural	95.8	64.4	60.4	68.1	45.6	76.6	19.3	2,841
Zanzibar	98.9	78.9	59.4	75.6	51.7	85.5	13.4	100
Pemba	98.7	67.0	46.9	63.2	37.6	76.8	21.9	44
Unguja	99.1	88.1	69.2	85.3	62.7	92.3	6.8	56
Education								
No education	91.1	55.1	42.8	57.9	32.0	64.4	26.7	1,093
Primary incomplete	98.4	66.4	65.5	70.9	50.6	79.3	19.2	854
Primary complete	99.4	75.0	76.9	76.2	57.2	88.7	10.8	1,866
Secondary+	100.0	84.7	85.1	83.4	65.8	96.2	3.8	215
Total	97.0	68.3	65.7	70.5	49.4	80.5	16.5	4,029

The question about level of risk was followed by a question that asked why the respondent felt their risk was either small or large. As shown in Table 10.8, the main reason that respondents feel they have a low risk of getting AIDS is that they are either abstaining from sexual contact or they are limiting their number of partners. Those who have never married or who were formerly married are likely to say they are abstaining, while married respondents are likely to say they are limiting their number of partners.

The main reason that women feel they have a moderate or great risk of getting AIDS is that their partners have other partners (Table 10.9). Among men, the main reason they feel at risk is that they are having unprotected sex. Men are also likely to say they are at risk because they have more than one partner.

Table 10.4 Misconceptions about HIV/AIDS transmission

Percentage of women age 15-49 who correctly identified three common misconceptions about HIV/AIDS transmission, by background characteristics, Tanzania 1999

Background characteristic	Has heard of HIV/AIDS	Percentage who know that: AIDS cannot be transmitted by: Sharing food	Mosquito bites	A healthy-looking person can be infected with HIV/AIDS	Knows all three misconceptions	Knows at least one misconception	Did not identify any misconceptions	Number of women
Age								
15-19	95.2	50.3	51.9	59.5	32.4	75.8	19.3	909
20-24	97.4	57.9	55.5	71.7	36.9	84.8	12.6	811
25-29	97.6	63.9	59.6	78.0	42.8	88.6	9.0	749
30-34	97.8	68.6	61.6	73.4	44.7	88.6	9.1	490
35-39	98.7	66.9	52.9	76.0	40.8	87.7	10.9	456
40-44	100.0	58.8	48.7	67.2	32.1	82.4	17.6	299
45-49	93.3	43.0	37.7	55.4	17.8	70.4	22.9	315
Residence								
Urban	99.8	73.0	70.8	86.2	54.1	95.1	4.7	1,122
Rural	95.9	52.9	47.5	62.7	29.8	78.3	17.6	2,907
Mainland/Zanzibar								
Mainland	96.9	58.4	53.7	69.1	36.3	82.8	14.1	3,929
Urban	99.8	72.9	70.6	86.2	53.9	95.1	4.7	1,088
Rural	95.8	52.9	47.2	62.5	29.6	78.1	17.7	2,841
Zanzibar	98.9	62.0	66.6	74.8	43.9	88.9	10.0	100
Pemba	98.7	51.9	59.8	62.3	31.3	83.9	14.7	44
Unguja	99.1	70.0	71.9	84.5	53.8	92.8	6.3	56
Education								
No education	91.1	39.2	34.0	48.0	16.4	65.7	25.4	1,093
Primary incomplete	98.4	54.0	50.3	65.8	31.0	81.6	16.9	854
Primary complete	99.4	68.7	64.6	80.4	47.5	91.9	7.5	1,866
Secondary+	100.0	85.9	78.0	93.4	65.4	98.8	1.1	215
Total	97.0	58.5	54.0	69.2	36.5	83.0	14.0	4,029

10.4 KNOWLEDGE AND USE OF CONDOMS

Consistent use of condoms is an effective way to avoid transmitting HIV/AIDS. As shown in Table 10.10, almost all respondents have heard of condoms (92 percent of women and 96 percent of men). Public sources such as government health clinics and hospitals are most commonly mentioned as places to get condoms. Men are also likely to cite pharmacies and other sources as places to get condoms. As expected, pharmacies are more commonly mentioned by urban residents and better-educated respondents.

Despite the widespread knowledge about condoms and their ability to prevent disease, condom use is not high in Tanzania. Of respondents who were sexually active during the year before the survey, only 16 percent of women and 37 percent of men had ever used condoms, mostly for family planning purposes and not for disease prevention (Tables 10.11.1 and 10.11.2).

Table 10.5.1 Knowledge and perception of HIV/AIDS: women

Percent distribution of women by knowledge and perception of HIV/AIDS, according to background characteristics, Tanzania 1999

Background characteristic	Can a healthy-looking person have the AIDS virus?			Can the AIDS virus be transmitted from mother to child?			Total	Knows someone with AIDS or who died of HIV/AIDS	Number of women
	Yes	No	Don't know	Yes	No	Don't know			
Age									
15-19	59.5	20.8	14.8	67.5	9.9	17.7	100.0	48.3	909
20-24	71.7	16.2	9.5	82.3	6.2	8.9	100.0	63.3	811
25-29	78.0	12.6	7.0	84.3	6.3	7.0	100.0	69.7	749
30-39	74.7	12.4	11.0	85.5	5.2	7.5	100.0	67.7	946
40-49	61.1	15.3	20.0	74.3	7.3	15.0	100.0	66.3	614
Marital status									
Currently married	70.7	15.0	11.3	80.9	6.7	9.5	100.0	64.9	2,653
Formerly in union	72.0	10.7	13.8	80.7	7.3	8.5	100.0	67.3	433
Never married	63.7	19.3	13.8	72.3	7.7	16.8	100.0	53.9	943
Residence									
Urban	86.2	8.8	4.8	90.2	4.1	5.4	100.0	72.7	1,122
Rural	62.7	18.1	15.0	74.5	8.1	13.3	100.0	58.7	2,907
Mainland/Zanzibar									
Mainland	69.1	15.5	12.3	78.6	7.0	11.3	100.0	63.1	3,929
Urban	86.2	8.8	4.8	90.2	4.1	5.5	100.0	73.2	1,088
Rural	62.5	18.0	15.2	74.2	8.1	13.5	100.0	59.2	2,841
Zanzibar	74.8	16.9	6.7	88.2	5.0	5.7	100.0	43.0	100
Pemba	62.3	28.3	6.8	84.0	7.5	7.1	100.0	42.2	44
Unguja	84.5	8.0	6.6	91.5	3.0	4.6	100.0	43.6	56
Education									
No education	48.0	19.7	23.4	60.9	9.6	20.7	100.0	49.4	1,093
Primary incomplete	65.8	19.2	13.4	79.8	7.4	11.3	100.0	60.5	854
Primary complete	80.4	12.5	6.3	87.4	5.5	6.5	100.0	69.7	1,866
Secondary+	93.4	5.7	0.7	93.2	4.9	1.9	100.0	76.5	215
Total	69.2	15.5	12.2	78.9	7.0	11.1	100.0	62.6	4,029

Eight percent of women and 16 percent of men said they had used a condom the last time they had had sex. Figures are considerably higher for sexual relations outside of marriage. For example, while only 4 percent of women and 5 percent of men said they had used condoms when they had last had sex with their husband/wife, the figures jump to 22-24 percent of women and 34 percent of men who said they had used condoms the last time they had had sex with either a regular partner (boyfriend or girlfriend) or someone else.

Women report more frequent use of condoms over the past few years. In 1996, only 5 percent of women said a condom was used the last time they had had sex; in 1999, the figure was 8 percent. And the proportion who report condom use the last time they had had sex with someone other than their husband increased from 17 percent in 1996 to about 23 percent in 1999. Interestingly, the proportion of men who say they had used condoms the last time they had had sex has not increased since 1996.

Table 10.5.2 Knowledge and perception of HIV/AIDS: men

Percent distribution of men by knowledge and perception of HIV/AIDS, according to background characteristics, Tanzania 1999

Background characteristic	Can a healthy-looking person have the AIDS virus?			Can the AIDS virus be transmitted from mother to child?			Total	Knows someone with AIDS or who died of HIV/AIDS	Number of women
	Yes	No	Don't know	Yes	No	Don't know			
Age									
15-19	62.7	19.0	14.9	64.8	13.4	18.5	100.0	52.6	790
20-24	76.6	14.4	8.9	82.1	6.1	11.6	100.0	67.0	540
25-29	87.3	9.6	3.1	85.0	6.5	8.5	100.0	73.2	546
30-39	83.6	10.0	6.0	91.0	3.3	5.6	100.0	72.3	817
40-49	79.5	12.3	7.2	82.1	7.5	9.4	100.0	74.6	478
50-59	75.5	14.4	9.9	82.0	10.1	7.7	100.0	77.9	371
Marital status									
Currently married	81.9	11.2	6.5	86.6	5.8	7.4	100.0	73.1	2,063
Formerly in union	78.0	14.1	7.9	82.7	9.6	7.6	100.0	76.6	190
Never married	69.2	16.7	12.0	71.0	10.6	16.2	100.0	58.8	1,289
Residence									
Urban	90.7	7.1	2.1	87.7	6.6	5.7	100.0	71.7	941
Rural	72.1	15.7	10.9	78.2	8.2	12.4	100.0	66.8	2,601
Mainland/Zanzibar									
Mainland	76.9	13.4	8.7	80.5	7.8	10.7	100.0	68.6	3,452
Urban	90.8	7.0	2.1	87.6	6.7	5.5	100.0	72.2	909
Rural	71.9	15.7	11.0	78.0	8.2	12.5	100.0	67.4	2,543
Zanzibar	81.9	13.7	3.4	88.4	4.2	6.5	100.0	47.7	90
Pemba	78.2	18.1	3.2	90.0	5.2	4.3	100.0	51.5	36
Unguja	84.3	10.8	3.6	87.4	3.5	8.0	100.0	45.2	55
Education									
No education	53.9	23.6	18.4	61.7	13.6	20.6	100.0	54.5	495
Primary incomplete	70.9	16.0	11.9	75.2	9.1	14.6	100.0	68.2	1,000
Primary complete	84.3	10.5	5.0	87.5	5.7	6.8	100.0	70.6	1,791
Secondary+	95.0	3.6	1.4	91.8	5.9	2.3	100.0	76.8	256
Total	77.0	13.4	8.6	80.7	7.7	10.6	100.0	68.1	3,542

10.5 ACCEPTABILITY OF CONDOM USE

Respondents were asked whether it is acceptable for a woman to ask a man to use a condom. They were also asked whether it is acceptable for a woman to ask a man with a sexually transmitted disease (STD) to use a condom or to refuse to have sex with him. Table 10.12 shows the results for women and men by background characteristics.

Forty-nine percent of women believe it is all right for a woman to ask a man to use a condom in general; 55 percent of women believe it is all right for a wife to ask her husband to use a condom or refuse to have sex at all if he has an STD. The level of acceptance in both scenarios is high among those who were formerly in union, the better educated, and those living in urban areas. Only 15 percent of women who have never had sex believe that it is acceptable to ask a partner to use a condom in general.

Table 10.6 Knowledge of mother-child transmission of HIV/AIDS

Percentage of women age 15-49 who know specific ways mother-child transmission of HIV/AID occurs, by background characteristics, Tanzania 1999

Background characteristic	HIV/AIDS can be transmitted from mother to child	Ways mother-child transmission of HIV/AIDS occurs				Doesn't know any specific way	Number of women
		During pregnancy	At delivery	Through breast milk	All three ways		
Age							
15-19	67.5	61.5	43.3	56.6	38.3	0.5	909
20-24	82.3	77.2	64.2	74.5	58.5	0.2	811
25-29	84.3	81.4	69.9	74.6	63.1	0.2	749
30-34	89.1	84.1	70.3	78.5	61.3	0.4	490
35-39	81.7	78.3	67.9	73.9	62.5	0.7	456
40-44	78.5	75.1	62.8	70.5	59.1	0.2	299
45-49	70.2	65.3	55.5	62.1	51.5	2.6	315
Residence							
Urban	90.2	86.6	71.4	79.2	64.4	0.4	1,122
Rural	74.5	69.6	56.9	65.9	51.4	0.6	2,907
Mainland/Zanzibar							
Mainland	78.6	74.1	60.8	69.3	54.9	0.5	3,929
Urban	90.2	86.6	71.6	79.0	64.6	0.4	1,088
Rural	74.2	69.4	56.7	65.6	51.2	0.6	2,841
Zanzibar	88.2	80.2	64.9	83.8	60.3	0.5	100
Pemba	84.0	73.6	67.9	78.8	61.7	1.2	44
Unguja	91.5	85.3	62.6	87.6	59.3	0.0	56
Education							
No education	60.9	55.8	44.4	53.1	40.4	1.1	1,093
Primary incomplete	79.8	74.2	56.9	67.5	50.7	0.7	854
Primary complete	87.4	83.6	70.9	79.0	64.6	0.2	1,866
Secondary+	93.2	88.3	74.2	81.1	64.6	0.0	215
Total	78.9	74.3	60.9	69.6	55.1	0.5	4,029

Fifty-six percent of men believe it is acceptable for a woman to ask a man to use a condom in general, and 58 percent believe it is all right for a wife to ask her husband to use a condom or to refuse to have sex with him if he has an STD. It is interesting to note that there is still a significant proportion of the population who believe that it is not right for a woman to prompt the use of condoms even if her husband has an STD.

10.6 Number of Sexual Partners

Given the fact that the vast majority of HIV infections in Tanzania are contracted through heterosexual contact, information on sexual behaviour is important in designing and monitoring intervention programmes. Both male and female respondents were asked questions about partners with whom they had had sex in the 12 months preceding the survey. Information about the sexual relationships of women and men is presented in Tables 10.13.1 and 10.13.2, respectively.

Table 10.7 Perception of the risk of getting HIV/AIDS

Percent distribution of women and men, by perception of the risk of getting HIV/AIDS, according to background characteristics, Tanzania 1999

Background characteristic	Women: Personal chance of getting HIV/AIDS: No risk at all	Small	Mod-erate	Great	Has AIDS	Don't know	Total	Number of women	Men: Personal chance of getting HIV/AIDS: No risk at all	Small	Mod-erate	Great	Don't know	Total	Number of men
Age															
15-19	53.3	9.8	7.1	6.3	0.2	23.4	100.0	909	47.8	14.5	10.1	5.4	22.1	100.0	790
20-24	31.4	21.7	15.7	11.4	0.0	19.8	100.0	811	35.7	28.2	15.1	8.5	12.5	100.0	540
25-29	33.0	14.3	15.9	16.5	0.0	20.2	100.0	749	43.9	25.1	13.7	8.6	8.7	100.0	546
30-39	28.2	19.0	14.7	16.3	0.0	21.8	100.0	946	34.6	26.5	20.2	6.3	12.5	100.0	817
40-49	32.0	17.9	12.0	13.5	0.0	24.6	100.0	614	38.0	20.2	18.7	8.8	14.2	100.0	478
50-64	NA	NA	NA	NA	NA	NA	NA	NA	43.3	20.6	15.4	10.5	10.3	100.0	371
Marital status															
Currently married	32.1	17.4	14.7	14.4	0.1	21.4	100.0	2,653	39.1	23.4	18.0	8.1	11.4	100.0	2,063
Formerly in union	30.5	22.6	11.4	13.5	0.0	22.1	100.0	433	32.0	30.0	15.3	11.7	11.0	100.0	190
Never married	49.5	10.9	8.9	7.5	0.0	23.2	100.0	943	44.1	19.7	11.4	6.0	18.8	100.0	1,289
No. of sexual partners other than spouse															
0	38.9	16.3	11.4	12.1	0.0	21.3	100.0	3,093	49.3	21.5	9.7	4.2	15.4	100.0	1,938
1	28.4	17.1	18.5	12.6	0.0	23.4	100.0	734	34.7	23.8	21.6	8.7	11.2	100.0	987
2-3	21.9	13.4	18.8	22.0	0.0	23.9	100.0	170	24.8	23.3	23.7	12.7	15.6	100.0	439
4+	5.0	32.3	7.8	17.2	0.0	37.7	100.0	30	14.5	22.7	22.0	27.9	12.9	100.0	165
DK/missing	0.0	30.6	0.0	0.0	0.0	69.4	100.0	1	38.1	17.7	44.1	0.0	0.0	100.0	14
Residence															
Urban	33.8	18.1	18.0	12.6	0.0	17.5	100.0	1,122	36.5	27.8	15.2	7.0	13.5	100.0	941
Rural	36.8	15.8	11.1	12.7	0.0	23.6	100.0	2,907	42.0	20.5	15.5	7.8	14.2	100.0	2,601
Mainland/Zanzibar															
Mainland	35.4	16.4	13.0	12.9	0.0	22.3	100.0	3,929	40.0	22.4	15.6	7.7	14.2	100.0	3,452
Urban	33.1	17.9	18.1	12.9	0.0	17.9	100.0	1,088	35.8	27.8	15.4	7.2	13.7	100.0	909
Rural	36.2	15.8	11.1	12.9	0.0	24.0	100.0	2,841	41.6	20.5	15.7	7.9	14.4	100.0	2,543
Zanzibar	60.3	17.1	11.4	4.1	0.0	7.2	100.0	100	58.3	22.6	8.8	3.6	6.7	100.0	90
Pemba	61.0	20.5	4.5	6.6	0.0	7.5	100.0	44	55.3	30.0	5.6	4.5	4.6	100.0	36
Unguja	59.7	14.5	16.8	2.1	0.0	7.0	100.0	56	60.3	17.7	10.8	3.1	8.1	100.0	55
Education															
No education	35.0	12.3	10.5	10.0	0.0	32.3	100.0	1,093	38.6	15.9	13.5	9.4	22.6	100.0	495
Primary incomplete	40.0	13.4	12.1	12.4	0.0	22.0	100.0	854	42.8	19.9	12.9	8.2	16.2	100.0	1,000
Primary complete	34.4	19.4	14.2	14.9	0.1	16.9	100.0	1,866	40.2	23.8	17.0	7.4	11.7	100.0	1,791
Secondary+	38.7	23.4	18.6	7.4	0.0	11.9	100.0	215	37.7	35.3	18.5	2.9	5.7	100.0	256
Total	36.0	16.4	13.0	12.7	0.0	21.9	100.0	4,029	40.5	22.4	15.5	7.6	14.1	100.0	3,542

Note: Total includes 1 woman and 14 men who reported "Don't know" to number of sexual partners in past 12 months.
NA = Not applicable

The table shows that among married women, 7 percent had had two or more partners in the year prior to the survey, including their husbands. Among unmarried women, 11 percent had had two or more partners, while almost half were not sexually active at all in the prior 12 months. Men report had having more sexual partners than women; 29 percent of married men and 25 percent of unmarried men report having had two or more partners in the 12 months before the survey. The proportion of men with two or more sexual partners is higher in rural areas than in urban areas. It is also higher among men in the Mainland than in Zanzibar.

Table 10.8 Reasons for perception of small/no risk of getting HIV/AIDS

Among women and men who think they have small or no risk of getting HIV/AIDS, percentage citing specific reasons for perception of risk, by marital status, Tanzania 1999

Marital status	Abstains from sex	Uses condoms	Only one partner	Partner has no other partner	Other reason	Number of women/ men
			WOMEN			
Currently married	3.1	4.7	83.6	17.0	8.9	1,312
Formerly in union	35.9	14.1	48.4	5.8	5.7	230
Never married	62.6	7.1	23.3	4.4	15.4	570
Total	22.7	6.3	63.5	12.4	10.3	2,112
			MEN			
Currently married	2.6	17.5	82.8	0.0	12.1	1,289
Formerly in union	22.4	37.5	37.5	0.0	18.5	118
Never married	43.6	26.8	26.1	0.0	16.3	822
Total	18.8	22.0	59.5	0.0	14.0	2,229

Table 10.9 Reasons for perception of moderate/great risk of getting HIV/AIDS

Among women and men who think they have moderate or great risk of getting HIV/AIDS, percentage citing specific reasons for perception of risk, by marital status Tanzania 1999

Marital status	Doesn't use condom	Multiple sex partners	Partner has other partners	Other reason	Number of women/ men
		WOMEN			
Currently married	31.1	6.2	61.7	28.1	771
Formerly in union	41.8	19.8	37.3	40.1	108
Never married	39.8	8.0	33.7	35.7	155
Total	33.5	7.9	55.0	30.5	1,033
		MEN			
Currently married	38.0	35.2	27.9	23.8	540
Formerly in union	35.1	35.4	23.0	25.9	51
Never married	55.9	30.3	18.8	20.4	225
Total	42.7	33.9	25.1	23.0	816

Table 10.10 Knowledge of condoms

Among women and men who have ever had sex, percentage who know of condoms and percentage who know of specific sources for condoms, by background characteristics, Tanzania 1999

Background characteristic	Source for condoms: women							Source for condoms: men						
	Knows of condom	Public	Private medical	Pharm-acy	Other source	Don't know	Number of women	Knows of condom	Public	Private medical	Pharm-acy	Other source	Don't know	Number of men
Age														
15-19	87.3	17.9	3.3	8.8	17.3	52.7	478	93.8	12.7	1.7	28.0	29.3	28.2	447
20-24	95.5	30.3	5.2	14.0	16.4	34.1	760	97.8	22.2	5.4	27.7	30.3	14.4	483
25-29	96.0	33.1	3.0	13.9	14.3	35.8	741	98.4	30.3	4.4	27.4	23.1	14.7	538
30-39	93.5	32.4	5.9	10.8	10.0	40.9	940	97.9	31.7	5.3	25.2	20.0	17.8	812
40-49	83.6	29.3	0.6	6.3	6.7	57.1	614	94.7	36.8	2.4	17.8	15.0	28.0	476
50-59	NA	NA	NA	NA	NA	NA	NA	91.5	27.6	2.7	12.1	14.8	42.7	370
Marital status														
Currently married	91.9	31.4	3.6	9.8	10.5	44.7	2,653	96.1	33.3	3.6	21.0	18.5	23.6	2,063
Formerly in union	90.7	30.6	5.0	13.4	15.0	36.0	433	96.9	26.7	3.7	29.2	20.0	20.4	190
Never married	93.2	18.2	3.9	16.3	23.6	38.0	448	96.2	14.2	4.7	28.9	30.9	21.3	874
Residence														
Urban	98.8	29.8	5.3	24.1	19.6	21.2	993	99.8	19.3	3.4	46.0	22.7	8.6	856
Rural	89.2	29.5	3.3	6.0	10.0	51.2	2,541	94.8	30.7	4.1	15.3	21.8	28.1	2,271
Mainland/Zanzibar														
Mainland	91.8	29.4	3.9	11.2	13.0	42.5	3,458	96.1	27.4	4.0	23.9	22.5	22.3	3,065
Urban	98.8	29.5	5.2	24.5	20.1	20.8	968	99.8	19.0	3.4	46.5	23.2	7.9	833
Rural	89.1	29.4	3.3	6.1	10.2	51.0	2,490	94.7	30.5	4.2	15.4	22.2	27.7	2,231
Zanzibar	94.1	37.1	3.4	5.0	1.3	53.2	75	97.6	36.8	1.3	14.0	3.2	44.6	62
Pemba	88.9	28.6	0.0	2.7	1.3	67.3	32	96.7	44.0	0.4	3.7	2.3	49.6	24
Unguja	98.0	43.5	6.0	6.7	1.3	42.5	43	98.2	32.3	1.9	20.6	3.7	41.5	38
Education														
No education	77.9	19.6	1.2	4.9	6.5	67.7	1,025	88.4	23.5	2.1	12.7	14.1	47.5	434
Primary incomplete	95.0	28.6	1.8	6.1	15.9	47.6	653	95.7	26.3	2.5	20.3	19.9	31.0	810
Primary complete	98.3	36.1	5.6	14.6	14.6	29.1	1,672	97.9	28.8	5.0	26.4	25.2	14.6	1,653
Secondary+	99.9	30.0	10.2	31.4	18.2	10.1	183	99.5	31.3	4.3	36.4	22.3	5.7	230
Total	91.9	29.6	3.8	11.1	12.7	42.8	3,533	96.1	27.6	3.9	23.7	22.1	22.7	3,127

NA = not applicable

Although it appears as if there has been an increase since 1996 in the percentage of both women and men who have had two or more partners during the year before the survey, the differences could be due to a change in the line of questioning about sexual behaviour. In the 1996 TDHS, married respondents were first asked about the last time they had had sex with their spouse. They were then asked if they had had any sexual partner other than their spouse, a particularly sensitive question. In the 1999 TRCHS, all respondents were asked about the last time they had had sex, the type of relationship they had with that partner (spouse, girlfriend/boyfriend, casual acquaintance, etc.), and then whether they had had sex with anyone else in the previous 12 months. It is likely that this "softer" series of questions that did not directly inquire about extramarital relationships elicited more honest reporting of the number of partners.

Table 10.11.1 Use of condoms: women

Among women who have had sex in the past year, the percentage who ever used condoms for family planning (FP) or to avoid STDs, and percentage who used condoms during last sexual intercourse, by type of partner and background characteristics, Tanzania 1999

Background characteristic	Used condom				Used condom during last sex with:							
					Spouse		Regular partner		Someone else		Any partner	
	For FP	To avoid STDs	Either for FP or to avoid STDs	Number of women	%	No. women	%	No. women	%	No. women	%	No. women
Age												
15-19	14.8	4.0	17.7	420	1.6	205	18.6	138	22.4	77	11.0	420
20-24	19.5	3.8	21.3	691	4.6	520	21.0	110	33.4	61	9.8	691
25-29	14.3	0.9	20.1	673	5.9	564	28.4	52	33.1	56	9.9	673
30-39	11.2	0.7	14.8	838	4.3	714	28.7	56	18.2	68	7.1	838
40-49	4.5	0.9	6.5	507	1.5	439	12.9	26	11.4	43	2.9	507
Marital status												
Currently married	10.0	0.6	12.1	2,432	4.0	2,380	9.6	20	20.8	31	4.3	2,432
Formerly in union	27.6	7.7	36.4	303	2.5	54	28.9	119	25.4	130	22.7	303
Never married	21.2	5.7	27.4	394	5.7	7	19.2	242	23.7	145	20.6	394
Residence												
Urban	21.9	3.5	27.1	909	5.1	607	33.2	180	37.5	122	15.0	909
Rural	9.5	1.2	12.0	2,219	3.6	1,834	11.5	202	15.2	184	5.3	2,219
Mainland/Zanzibar												
Mainland	13.3	1.9	16.6	3,064	4.0	2,382	21.8	379	24.2	303	8.2	3,064
Urban	22.1	3.6	27.5	888	5.1	589	33.3	179	37.8	121	15.2	888
Rural	9.6	1.3	12.2	2,176	3.7	1,793	11.6	200	15.3	183	5.4	2,176
Zanzibar	5.3	0.1	6.9	64	2.7	60	7.0	2	4.2	2	2.9	64
Pemba	0.8	0.0	3.0	27	2.7	27	0.0	0	0.0	0	2.7	27
Unguja	8.7	0.2	9.7	37	2.7	33	7.6	2	4.2	2	3.0	37
Education												
No education	3.7	0.6	6.0	825	1.8	707	11.2	59	7.6	59	2.9	825
Primary incomplete	9.4	1.1	12.7	601	2.9	455	13.8	77	16.0	69	5.8	601
Primary complete	17.6	2.3	21.0	1,541	5.1	1,188	21.8	188	31.6	166	10.0	1,541
Secondary+	31.7	7.5	39.9	162	11.7	92	43.1	57	46.5	13	25.5	162
Total	13.1	1.9	16.4	3,129	4.0	2,441	21.7	382	24.1	306	8.1	3,129

10.7 AIDS TESTING

Tables 10.14.1 and 10.14.2 show the percentage of women and men who have been tested for HIV/AIDS or want to be tested and, of these, the percentage who know of a source of AIDS testing, according to background characteristics. Seven percent of women and 12 percent of men have been tested for AIDS. Testing coverage has increased slightly over time; the corresponding proportions in 1996 were 4 percent for women and 11 percent for men.

Interestingly, about two-thirds of women and men say they would like to be tested for HIV/AIDS, and more than half (52 percent of women and 63 percent of men) know a place where they can be tested for HIV/AIDS. For women who have not been tested but would like to be, 35 percent say they have not been tested because they do not know where to go, while 20 percent say they do not have time to get tested, and 18 percent say they have not been tested because it costs too much. Men cite similar reasons for not getting tested; however, they are more likely than women to say they have not been tested because they do not have time.

Table 10.11.2 Use of condoms: men

Among men who have had sex in the past year, the percentage who ever used condoms for family planning (FP) or to avoid STDs, and percentage who used condoms during last sexual intercourse, by type of partner and background characteristics, Tanzania 1999

Background characteristic	Used condom				Used condom during last sex with:							
					Spouse		Regular partner		Someone else		Any partner	
	For FP	To avoid STDs	Either for FP or to avoid STDs	Number of men	%	No. men	%	No. men	%	No. men	%	No. men
Age												
15-19	31.2	18.2	35.8	397	3.2	18	27.4	134	24.4	245	24.5	397
20-24	47.8	15.2	51.4	448	8.3	141	34.6	101	38.6	206	28.2	448
25-29	42.9	10.8	47.3	509	10.8	349	47.4	62	45.6	98	22.0	509
30-39	35.0	9.3	40.1	790	5.2	645	39.5	42	46.0	103	12.3	790
40-49	20.8	3.9	22.8	448	3.3	374	38.5	17	22.8	56	7.1	448
50-59	9.4	0.5	11.5	341	0.9	318	6.7	7	5.7	16	1.2	341
Marital status												
Currently married	28.0	5.0	31.4	2,001	5.4	1,823	32.0	45	31.3	133	7.7	2,001
Formerly in union	49.5	18.6	54.0	165	0.0	19	36.4	50	37.3	96	32.7	165
Never married	41.1	20.4	46.1	767	0.0	3	34.3	269	33.8	495	33.9	767
Residence												
Urban	46.1	14.7	50.0	796	6.6	459	52.0	119	52.2	218	25.9	796
Rural	27.7	8.0	31.5	2,138	4.9	1,387	25.8	245	25.9	506	12.3	2,138
Mainland/Zanzibar												
Mainland	32.9	9.9	36.8	2,877	5.4	1,799	34.4	361	33.8	717	16.1	2,877
Urban	46.5	14.9	50.4	775	6.6	444	52.3	117	52.5	214	26.2	775
Rural	27.9	8.1	31.8	2,101	5.0	1,355	25.7	243	25.9	503	12.4	2,101
Zanzibar	18.8	5.2	20.6	57	3.2	47	29.3	3	32.2	7	8.1	57
Pemba	5.5	2.9	9.1	22	1.7	21	43.0	1	0.0	0	3.1	22
Unguja	27.3	6.7	27.9	35	4.5	26	24.7	2	32.7	7	11.3	35
Education												
No education	11.7	2.8	15.2	400	2.0	287	7.1	36	14.3	77	4.9	400
Primary incomplete	24.4	7.4	26.7	750	1.6	480	19.8	82	22.5	189	8.9	750
Primary complete	39.4	12.2	43.8	1,571	7.3	933	40.1	211	40.1	427	20.6	1,571
Secondary+	51.4	13.8	57.2	212	11.6	145	61.5	35	63.5	32	27.6	212
Total	32.7	9.8	36.5	2,933	5.3	1,845	34.3	364	33.8	724	16.0	2,933

10.8 KNOWLEDGE OF CONDOM'S DUAL PROTECTION

Respondents were asked whether they knew any method that can protect against pregnancy and STDs. Table 10.15 shows the percentage of respondents who know that condoms can protect against pregnancy and STDs. Men are better informed than women, with 65 percent mentioning that condoms provide dual protection, compared with only 55 percent of women. This knowledge is high for both sexes among those formerly in union, and it is low among those who have never had sex. Women in urban areas are more likely than those in rural areas to know that condoms provide dual protection. Women in the Mainland are more knowledgeable than those in Zanzibar. Fifty-five percent of women in the Mainland know a condom provides dual protection, compared with 36 percent in Zanzibar.

Table 10.12 Acceptability of women prompting use of condoms

Percentage of women and men who believe it is acceptable for a woman to ask a man to use a condom in general, and if he has a STD, by background characteristics, Tanzania 1999

Background characteristic	Women			Men		
	Acceptable for a woman to ask man to use condom	If man has STD, acceptable for woman to ask him to use condom or to refuse sex	Number of women	Acceptable for a woman to ask man to use condom	If man has STD, acceptable for woman to ask him to use condom or to refuse sex	Number of men
Age						
15-19	29.6	35.5	909	38.1	40.1	790
20-24	59.4	64.2	811	66.8	68.1	540
25-29	63.4	68.4	749	66.9	71.1	546
30-39	52.1	58.7	946	65.2	67.4	817
40-49	41.5	50.0	614	59.2	58.6	478
50-59	NA	NA	0	40.8	42.6	371
Marital status						
Currently married	51.6	59.8	2,653	60.2	63.0	2,063
Formerly in union	62.1	63.3	433	64.0	65.6	190
Never married	35.5	37.8	943	49.0	49.4	1,289
Had sex	58.0	56.3	448	63.8	63.2	874
Never had sex	15.1	21.1	496	17.8	20.2	415
Residence						
Urban	68.2	70.4	1,122	72.6	73.1	941
Rural	41.6	49.1	2,907	50.4	52.8	2,601
Mainland/Zanzibar						
Mainland	48.9	54.7	3,929	56.9	58.6	3,452
Urban	68.3	70.1	1,088	73.6	73.9	909
Rural	41.5	48.8	2,841	50.9	53.2	2,543
Zanzibar	50.5	67.8	100	35.0	40.5	90
Pemba	39.4	51.9	44	28.4	35.7	36
Unguja	59.1	80.2	56	39.4	43.7	55
Education						
No education	30.7	41.4	1,093	32.7	36.7	495
Primary incomplete	42.7	50.1	854	44.8	47.7	1,000
Primary complete	58.5	62.2	1,866	66.0	66.4	1,791
Secondary+	84.3	82.3	215	79.3	83.4	256
Total	49.0	55.1	4,029	56.3	58.2	3,542

NA = Not applicable

Table 10.13.1 Number of sexual partners: women

Percent distribution of married and unmarried women by number of persons with whom they had sexual intercourse in the past 12 months (including spouse and excluding spouse), according to background characteristics, Tanzania 1999

Background characteristic	Married women										Unmarried women					
	Number of sexual partners (including spouse)					Number of sexual partners (excluding spouse)					Number of sexual partners					
	0	1	2-3	4+	Total	0	1	2-3	4+	Total	No. of married women	0	1	2-3	4+	Total	No. of unmarried women
Age																	
15-19	8.1	84.0	7.4	0.5	100.0	90.0	8.5	1.5	0.0	100.0	227	66.7	27.3	5.6	0.4	100.0	682
20-24	4.1	86.8	8.1	0.9	100.0	89.5	7.0	3.5	0.0	100.0	550	30.1	51.9	13.0	4.9	100.0	261
25-29	6.9	88.7	4.3	0.1	100.0	94.2	4.7	1.1	0.0	100.0	615	19.4	62.4	17.8	0.3	100.0	134
30-39	5.6	86.8	7.2	0.3	100.0	91.2	7.5	0.9	0.3	100.0	771	26.7	53.4	13.0	6.9	100.0	175
40-49	7.1	87.9	5.0	0.0	100.0	93.0	5.3	1.8	0.0	100.0	490	42.6	52.8	4.6	0.0	100.0	124
Residence																	
Urban	3.5	86.1	10.0	0.4	100.0	88.1	9.8	1.8	0.3	100.0	622	37.8	47.2	11.9	3.0	100.0	501
Rural	6.9	87.6	5.2	0.3	100.0	92.9	5.4	1.7	0.0	100.0	2,031	53.6	37.4	7.4	1.5	100.0	876
Mainland/Zanzibar																	
Mainland	6.1	87.0	6.4	0.4	100.0	91.6	6.5	1.8	0.1	100.0	2,591	46.8	41.8	9.3	2.1	100.0	1,338
Urban	3.5	85.8	10.3	0.4	100.0	87.9	10.0	1.8	0.3	100.0	602	36.4	48.2	12.2	3.1	100.0	486
Rural	6.9	87.4	5.3	0.3	100.0	92.8	5.4	1.7	0.0	100.0	1,989	52.7	38.2	7.6	1.5	100.0	853
Zanzibar	3.2	95.2	1.6	0.0	100.0	97.2	2.8	0.0	0.0	100.0	62	86.0	12.9	1.1	0.0	100.0	38
Pemba	1.6	97.6	0.8	0.0	100.0	98.9	1.1	0.0	0.0	100.0	27	95.4	4.6	0.0	0.0	100.0	16
Unguja	4.4	93.3	2.3	0.0	100.0	95.8	4.2	0.0	0.0	100.0	34	78.9	19.2	1.9	0.0	100.0	22
Marital duration																	
Never married	NA	NA	NA	NA	100.0	NA	NA	NA	NA	100.0	0	57.7	34.6	6.7	1.0	100.0	943
0-4	7.2	85.2	7.4	0.2	100.0	90.8	7.2	2.0	0.0	100.0	645	17.3	61.5	10.5	10.4	100.0	67
5-9	5.3	87.9	5.6	1.2	100.0	91.7	5.9	2.2	0.2	100.0	588	15.3	52.1	27.5	5.0	100.0	96
10-14	4.9	89.7	5.5	0.0	100.0	93.7	4.8	1.5	0.0	100.0	471	28.8	44.2	19.3	7.7	100.0	81
15+	6.4	86.9	6.5	0.1	100.0	91.5	7.0	1.3	0.1	100.0	949	34.5	58.7	6.3	0.5	100.0	189
Education																	
No education	8.9	84.0	6.3	0.7	100.0	90.7	7.1	2.1	0.0	100.0	840	47.7	43.8	6.4	2.0	100.0	253
Primary incomplete	3.9	89.0	7.0	0.1	100.0	91.1	7.7	1.1	0.1	100.0	468	60.4	30.8	7.2	1.7	100.0	386
Primary complete	4.7	88.6	6.5	0.2	100.0	92.4	5.7	1.8	0.1	100.0	1,246	42.1	44.6	10.6	2.7	100.0	620
Secondary+	9.9	89.2	1.0	0.0	100.0	96.6	3.1	0.3	0.0	100.0	99	37.5	49.8	12.8	0.0	100.0	116
Total	6.1	87.2	6.3	0.3	100.0	91.8	6.4	1.7	0.1	100.0	2,653	47.9	41.0	9.0	2.0	100.0	1,376

NA = Not applicable

Table 10.13.2 Number of sexual partners: men

Percent distribution of married and unmarried men by number of persons with whom they had sexual intercourse in the past 12 months (including spouse and excluding spouse), according to background characteristics, Tanzania 1999

Background characteristic	Married men										Unmarried men					
	Number of sexual partners (including spouse)					Number of sexual partners (excluding spouse)					Number of sexual partners					
	0	1	2-3	4+	Total	0	1	2-3	4+	Total	No. of married men	0	1	2-3	4+	Total	No. of unmarried men
Age																	
15-19	0.0	68.4	28.5	3.1	100.0	61.8	32.5	2.7	3.1	100.0	18	50.5	31.5	13.4	4.5	100.0	772
20-24	0.0	61.9	28.7	9.4	100.0	58.0	21.3	11.4	9.3	100.0	158	23.8	44.0	20.6	11.6	100.0	382
25-29	2.8	66.7	27.5	3.0	100.0	65.2	24.2	9.4	1.1	100.0	401	17.2	49.7	24.0	9.1	100.0	144
30-39	1.7	69.7	24.9	3.7	100.0	68.6	18.9	9.4	3.1	100.0	716	13.3	56.4	18.9	11.5	100.0	101
40-49	4.1	67.8	25.1	2.9	100.0	67.8	21.4	8.6	2.1	100.0	429	18.0	46.3	25.5	10.2	100.0	50
50-59	4.1	73.7	18.9	3.4	100.0	75.6	16.1	7.4	0.9	100.0	341	50.1	27.5	17.4	4.9	100.0	30
Residence																	
Urban	2.4	74.6	20.4	2.5	100.0	74.4	17.5	5.9	2.1	100.0	504	30.4	41.6	20.6	7.5	100.0	438
Rural	2.7	66.8	26.1	4.2	100.0	65.8	21.2	10.0	2.8	100.0	1,559	39.4	37.4	15.7	7.5	100.0	1,041
Mainland/Zanzibar																	
Mainland	2.7	68.3	25.1	3.8	100.0	67.4	20.5	9.1	2.7	100.0	2,014	35.5	39.3	17.5	7.7	100.0	1,438
Urban	2.4	74.2	20.8	2.5	100.0	74.0	17.7	6.0	2.1	100.0	488	28.9	42.4	21.1	7.6	100.0	421
Rural	2.7	66.2	26.4	4.2	100.0	65.2	21.4	10.1	2.8	100.0	1,526	38.3	38.0	16.0	7.7	100.0	1,017
Zanzibar	2.5	84.0	11.4	2.1	100.0	84.8	11.7	2.3	1.2	100.0	50	78.7	15.2	4.7	1.2	100.0	41
Pemba	2.5	93.1	3.6	0.9	100.0	94.0	5.1	0.4	0.4	100.0	22	95.7	2.8	1.3	0.0	100.0	14
Unguja	2.5	76.7	17.7	3.2	100.0	77.4	16.9	3.8	1.8	100.0	27	70.4	21.4	6.4	1.8	100.0	27
Marital duration																	
Never married	NA	NA	NA	NA	100.0	NA	NA	NA	NA	100.0	0	40.2	37.3	15.8	6.7	100.0	1,289
0-4	2.5	68.7	23.6	5.0	100.0	67.7	19.0	8.9	4.2	100.0	475	2.6	51.9	29.0	16.5	100.0	57
5-9	1.1	69.7	27.1	1.9	100.0	68.2	22.4	8.2	1.2	100.0	384	4.8	49.7	42.1	3.5	100.0	33
10-14	1.9	67.3	25.4	5.0	100.0	64.5	23.5	8.7	3.4	100.0	366	2.9	40.9	16.7	39.6	100.0	23
15+	3.8	68.7	24.0	3.3	100.0	69.7	18.6	9.5	2.0	100.0	838	27.7	45.8	20.2	6.4	100.0	76
Education																	
No education	3.1	68.9	22.2	5.8	100.0	68.0	17.1	11.6	3.3	100.0	326	47.7	31.5	16.1	4.7	100.0	169
Primary incomplete	3.0	71.2	22.3	3.2	100.0	70.4	18.5	8.9	2.0	100.0	531	48.9	31.4	14.5	5.2	100.0	469
Primary complete	2.3	66.2	27.4	3.7	100.0	65.3	23.0	8.6	2.8	100.0	1,050	26.3	44.3	19.3	10.2	100.0	740
Secondary+	3.4	74.7	20.0	1.9	100.0	77.5	14.6	6.2	1.8	100.0	156	38.6	42.5	16.0	2.8	100.0	101
Total	2.7	68.7	24.7	3.8	100.0	67.9	20.3	9.0	2.6	100.0	2,063	36.7	38.6	17.2	7.5	100.0	1,479

A = Not applicable

Table 10.14.1 Testing for HIV/AIDS: women

Percentage of women who have been tested for HIV/AIDS, percentage who would like to be tested, and percentage who know a source for HIV/AIDS testing, and among women who want to be tested for HIV/AIDS, percentage who gave specific reasons why they have not been tested, by background characteristics, Tanzania 1999

Background characteristic	All women				Reason women who want to be tested for HIV/AIDS have not been tested					Number of women who want to be tested for HIV/AIDS
	Have been tested for HIV/AIDS	Want to be tested for HIV/AIDS	Know source for HIV/ AIDS test	Number of women	Don't know where to go	Costs too much	Afraid to get results	Don't have time to go	Other	
Age										
15-19	4.0	59.3	38.2	909	43.9	15.8	5.2	15.5	29.0	539
20-24	6.0	71.1	54.9	811	33.5	17.5	7.9	20.5	28.0	576
25-29	10.0	67.0	59.9	749	31.7	18.8	6.9	19.8	32.5	502
30-39	7.0	65.5	58.0	946	32.3	17.1	4.8	24.3	33.3	619
40-49	6.0	53.6	47.4	614	35.0	22.5	7.6	21.9	30.2	329
Marital status										
Currently married	6.6	65.4	52.4	2,653	35.5	16.5	5.3	21.7	30.9	1,735
Formerly in union	9.9	63.8	61.2	433	26.2	27.8	11.9	20.7	30.9	276
Never married	4.7	58.8	45.1	943	38.8	17.5	6.8	16.2	29.8	555
Had sex	8.1	65.2	55.7	448	32.2	20.5	9.9	17.6	27.2	292
Never had sex	1.7	53.0	35.6	496	46.1	14.2	3.4	14.7	32.6	263
Residence										
Urban	12.5	61.5	70.9	1,122	23.5	16.6	10.0	21.5	39.1	690
Rural	4.2	64.6	44.2	2,907	39.5	18.4	5.0	20.0	27.6	1,877
Mainland/Zanzibar										
Mainland	6.6	63.9	51.7	3,929	35.5	18.3	6.4	20.4	30.1	2,511
Urban	12.7	61.8	71.3	1,088	23.3	17.0	10.2	21.5	38.8	672
Rural	4.3	64.7	44.1	2,841	39.9	18.8	5.1	20.0	27.0	1,839
Zanzibar	3.7	55.1	50.5	100	23.3	1.8	3.6	20.6	54.1	55
Pemba	2.2	52.4	51.4	44	11.1	0.0	3.4	11.2	76.4	23
Unguja	4.9	57.2	49.8	56	32.0	3.2	3.8	27.3	38.3	32
Education										
No education	2.4	57.1	30.9	1,093	45.5	18.3	3.4	19.2	25.6	625
Primary incomplete	5.5	63.1	46.6	854	42.3	17.5	5.1	20.2	28.7	539
Primary complete	7.8	68.9	62.2	1,866	29.1	18.2	8.0	21.0	32.6	1,286
Secondary+	20.0	54.0	85.4	215	14.8	14.8	10.2	21.5	45.4	116
Total	6.5	63.7	51.6	4,029	35.2	17.9	6.4	20.4	30.7	2,566

Table 10.14.2 Testing for HIV/AIDS: men

Percentage of men who have been tested for HIV/AIDS, percentage who would like to be tested, and percentage who know a source for HIV/AIDS testing, and among men who want to be tested, percentage who gave specific reasons why they have not been tested, by background characteristics, Tanzania 1999

Background characteristic	All men				Reason men who want to be tested for HIV/AIDS have not been tested					Number of men who want to be tested for HIV/AIDS
	Have been tested for HIV/AIDS	Want to be tested for HIV/AIDS	Know source for HIV/ AIDS test	Number of men	Don't know where to go	Costs too much	Afraid to get results	Don't have time to go	Other	
Age										
15-19	4.0	61.2	45.9	790	40.2	16.5	3.5	28.2	23.1	484
20-24	12.3	63.6	64.8	540	25.1	20.9	5.3	34.1	23.6	343
25-29	15.5	67.1	72.3	546	20.4	19.3	6.1	34.2	28.8	366
30-39	16.6	62.8	75.6	817	17.7	18.9	6.5	31.9	32.1	513
40-49	16.6	57.3	67.0	478	26.1	17.5	3.5	34.1	28.4	274
50-64	9.4	64.9	65.1	371	27.1	19.8	4.3	26.3	33.4	241
Marital status										
Currently married	15.4	63.0	70.6	2,063	23.5	17.8	5.6	30.5	31.0	1,301
Formerly in union	11.7	67.1	73.7	190	13.5	22.2	3.0	46.6	27.3	127
Never married	7.2	61.6	53.5	1,289	32.9	19.6	4.3	30.7	23.0	794
Had sex	9.5	65.9	62.5	874	26.7	23.6	5.8	34.8	19.9	577
Never had sex	2.3	52.3	34.6	415	49.4	8.9	0.2	19.8	31.2	217
Residence										
Urban	18.9	56.3	79.1	941	14.2	15.1	5.0	40.9	32.4	529
Rural	9.8	65.1	59.3	2,601	30.0	19.8	5.0	28.6	26.6	1,692
Mainland/Zanzibar										
Mainland	12.2	62.8	64.7	3,452	26.3	19.1	5.1	31.6	27.4	2,169
Urban	19.0	56.3	79.8	909	13.5	15.5	5.1	41.3	32.1	512
Rural	9.8	65.2	59.3	2,543	30.2	20.2	5.0	28.6	26.0	1,658
Zanzibar	11.5	58.0	57.6	90	24.9	2.0	2.4	27.4	49.2	52
Pemba	9.6	58.9	68.6	36	10.3	0.6	0.5	10.4	79.3	21
Unguja	12.7	57.4	50.5	55	34.7	3.0	3.7	38.8	29.0	31
Education										
No education	5.0	56.1	42.3	495	35.0	21.1	4.0	29.9	25.4	278
Primary incomplete	8.7	62.6	55.8	1,000	33.6	16.6	4.8	26.4	26.4	626
Primary complete	13.7	66.3	72.1	1,791	21.9	19.2	5.2	34.5	28.2	1,188
Secondary+	29.3	50.6	88.5	256	11.5	19.2	5.9	32.0	37.9	130
Total	12.2	62.7	64.5	3,542	26.3	18.7	5.0	31.5	28.0	2,222

Table 10.15 Knowledge of dual protection of condoms

Percentage of women and men who know that condoms can protect against both pregnancy and sexually transmitted diseases, by background characteristics, Tanzania 1999

Background characteristic	Percentage of women who know condom is dual protection	Number of women	Percentage of men who know condom is dual protection	Number of men
Age				
15-19	40.6	909	47.4	790
20-24	65.3	811	73.6	540
25-29	65.2	749	77.0	546
30-39	58.5	946	77.2	817
40-49	41.5	614	59.1	478
50-59	NA	NA	52.5	371
Marital status				
Currently married	55.9	2,653	69.4	2,063
Formerly in union	64.1	433	71.8	190
Never married	46.2	943	56.7	1,289
Had sex	67.0	448	70.5	874
Never had sex	27.4	496	27.7	415
Residence				
Urban	74.3	1,122	79.6	941
Rural	46.8	2,907	59.7	2,601
Mainland/Zanzibar				
Mainland	54.9	3,929	65.5	3,452
Urban	75.2	1,088	80.5	909
Rural	47.2	2,841	60.1	2,543
Zanzibar	36.4	100	44.4	90
Pemba	30.3	44	39.0	36
Unguja	41.1	56	47.9	55
Education				
No education	31.5	1,093	39.3	495
Primary incomplete	48.1	854	55.2	1,000
Primary complete	67.6	1,866	74.4	1,791
Secondary+	83.0	215	86.9	256
Total	54.5	4,029	64.9	3,542

NA = Not applicable

REFERENCES

Bureau of Statistics [Tanzania]. 1967. *Population Census 1967*. Vol. 6. Dar es Salaam: Bureau of Statistics.

Bureau of Statistics [Tanzania]. 1978. *Population Census 1978*. Vol. 8. Dar es Salaam: Bureau of Statistics.

Bureau of Statistics [Tanzania]. 1988. *Population Census 1988. National profile*. Dar es Salaam: Bureau of Statistics.

Bureau of Statistics [Tanzania]. 1994. *Population Census 1988. Analytical report*. Dar es Salaam: Bureau of Statistics.

Bureau of Statistics [Tanzania] and Macro International. 1997. *Tanzania Demographic and Health Survey 1996*. Calverton, Maryland: Bureau of Statistics and Macro International.

Ngallaba, Sylvester, Saidi H. Kapiga, Ireneus Ruyobya, and J. Ties Boerma. 1993. *Tanzania Demographic and Health Survey 1991/1992*. Columbia, Maryland: Bureau of Statistics and Macro International Inc.

Weinstein, Kia I., Sylvester Ngallaba, Anne R. Cross, and F.M. Mburu. 1995. *Tanzania Knowledge, Attitudes and Practices Survey 1994*. Calverton, Maryland: Bureau of Statistics [Tanzania] and Macro International Inc.

SAMPLE IMPLEMENTATION

APPENDIX A

A.1.1 Sample implementation: women

Percent distribution of households and eligible women in the 1999 TRCHS sample by results of the household and individual interviews, and household, eligible woman, and overall response rates, according to sample domain and urban-rural residence, Tanzania 1999

Result of interview and response rate	Sample domain								
	Mainland			Zanzibar			Residence		
	Total	Urban	Rural	Total	Pemba	Unguja	Urban	Rural	Total
Selected households									
Completed (C)	93.9	89.8	96.1	96.2	94.7	97.2	91.4	96.1	94.5
No competent respondent (HP)	1.3	2.5	0.7	0.7	0.8	0.6	2.1	0.7	1.2
Refused (R)	0.1	0.1	0.1	0.1	0.0	0.2	0.2	0.0	0.1
Dwelling not found (DNF)	0.5	1.1	0.2	0.1	0.0	0.2	0.9	0.1	0.4
Household absent (HA)	0.8	1.3	0.5	0.7	1.1	0.4	1.1	0.6	0.8
Dwelling vacant (DV)	3.1	4.9	2.2	2.2	3.3	1.5	4.1	2.3	2.9
Dwelling destroy (DD)	0.3	0.3	0.3	0.0	0.0	0.0	0.2	0.2	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of households	2,924	1,002	1,922	902	361	541	1,304	2,522	2,826
Household response rate (HRR)[1]	98.1	96.1	99.1	99.1	99.1	99.1	96.7	99.1	98.3
Eligible women									
Completed (EWC)	97.9	97.8	97.9	97.7	96.6	98.5	98.1	97.7	97.8
Not at home (EWNH)	1.5	1.4	1.6	1.4	2.4	0.7	1.2	1.6	1.5
Refused (EWR)	0.2	0.5	0.1	0.3	0.0	0.5	0.4	0.1	0.2
Incapacitated (EWI)	0.3	0.3	0.3	0.5	0.7	0.3	0.3	0.4	0.4
Other (EWO)	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.1	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	3,126	1,059	2,067	992	410	582	2,446	2,672	3,118
Eligible woman response rate (EWRR)[2]	97.9	97.8	97.9	97.7	96.6	98.5	98.1	97.7	97.8
Overall response rate (ORR)[3]	96.0	94.0	97.0	96.8	95.7	97.5	94.8	96.9	96.2

Note: The household response rate is calculated for completed households as a proportion of completed, no competent respondent, refused, and dwelling not found. The eligible woman response rate is calculated for completed interviews as a proportion of completed, not at home, postponed, refused, partially completed, incapacitated and "other." The overall response rate is the product of the household and eligible woman response rates.

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{C}{C + HP + R + DNF} * 100$$

[2] Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:

$$\frac{EWC}{EWC + EWNH + EWR + EWI + EWO} * 100$$

[3] The overall response rate (ORR) is calculated as: $ORR = (HRR * EWRR) \div 100$

A.1.2 Sample implementation: men

Percent distribution of households and eligible men in the 1999 TRCHS sample by results of the household and individual interviews, and household, eligible man, and overall response rates, according to sample domain and urban-rural residence, Tanzania 1999

Result of interview and response rate	Sample domain						Residence		
	Mainland			Zanzibar					
	Total	Urban	Rural	Total	Pemba	Unguja	Urban	Rural	Total
Selected households									
Completed (C)	93.9	89.8	96.1	96.2	94.7	97.2	91.4	96.1	94.5
No competent respondent (HP)	1.3	2.5	0.7	0.7	0.8	0.6	2.1	0.7	1.2
Refused (R)	0.1	0.1	0.1	0.1	0.0	0.2	0.2	0.0	0.1
Dwelling not found (DNF)	0.5	1.1	0.2	0.1	0.0	0.2	0.9	0.1	0.4
Household absent (HA)	0.8	1.3	0.5	0.7	1.1	0.4	1.1	0.6	0.8
Dwelling vacant (DV)	3.1	4.9	2.2	2.2	3.3	1.5	4.1	2.3	2.9
Dwelling destroy (DD)	0.3	0.3	0.3	0.0	0.0	0.0	0.2	0.2	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of households	2,924	1,002	1,922	902	361	541	1,304	2,522	2,826
Household response rate (HRR)[1]	98.1	96.1	99.1	99.1	99.1	99.1	96.7	99.1	98.3
Eligible men									
Completed (EMC)	92.6	90.1	93.9	96.0	95.8	96.2	91.4	94.5	93.4
Not at home (EMNH)	5.7	7.0	5.0	2.1	2.7	1.7	5.9	4.2	4.8
Postponed (EMP)	0.1	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Refused (EMR)	0.5	0.8	0.3	0.9	0.6	1.0	0.7	0.5	0.6
Partly completed (EMPC)	0.1	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Incapacitated (EMI)	0.8	1.0	0.7	0.8	0.6	0.9	1.0	0.7	0.8
Other (EMO)	0.3	0.7	0.1	0.2	0.3	0.2	0.6	0.1	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	2,887	997	1,890	905	330	575	1,367	2,425	3,792
Eligible man response rate (EMRR)[2]	92.6	90.1	93.9	96.0	95.8	96.2	91.4	94.5	93.4
Overall response rate (ORR)[3]	90.8	86.5	93.1	95.1	94.9	95.3	88.4	93.7	91.8

Note: The household response rate is calculated for completed households as a proportion of completed, no competent respondent, refused, and dwelling not found. The eligible woman response rate is calculated for completed interviews as a proportion of completed, not at home, postponed, refused, partially completed, incapacitated and "other." The overall response rate is the product of the household and eligible woman response rates.

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{C}{C + HP + R + DNF} * 100$$

[2] Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:

$$\frac{EMC}{EMC + EMNH + EMP + EMR + EMPC + EMI + EMO} * 100$$

[3] The overall response rate (ORR) is calculated as: $ORR = (HRR * EMRR) \div 100$

ESTIMATES OF SAMPLING ERRORS

APPENDIX B

The estimates from a sample survey are affected by two types of errors: (1) nonsampling errors, and (2) sampling errors. Nonsampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the TRCHS to minimise this type of error, nonsampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the TRCHS is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

A sampling error is usually measured in terms of the *standard error* for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95 percent of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the TRCHS sample is the result of a two-stage stratified design, and, consequently, it was necessary to use more complex formulae. The computer software used to calculate sampling errors for the TRCHS is the ISSA Sampling Error Module (SAMPERR). This module used the Taylor linearisation method of variance estimation for survey estimates that are means or proportions. The Jackknife repeated replication method is used for variance estimation of more complex statistics such as fertility and mortality rates.

The Taylor linearisation method treats any percentage or average as a ratio estimate, $r = y/x$, where y represents the total sample value for variable y, and x represents the total number of cases in the group or subgroup under consideration. The variance of r is computed using the formula given below, with the standard error being the square root of the variance:

$$var(r) = \frac{1-f}{x^2} \sum_{h=1}^{H} \left[\frac{m_h}{m_h - 1} \left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h} \right) \right]$$

in which

$$z_{hi} = y_{hi} - r \cdot x_{hi} \text{ , and } z_h = y_h - r \cdot x_h$$

where h represents the stratum which varies from 1 to H,
m_h is the total number of clusters selected in the h^{th} stratum,
y_{hi} is the sum of the weighted values of variable y in the i^{th} cluster in the h^{th} stratum,
x_{hi} is the sum of the weighted number of cases in the i^{th} cluster in the h^{th} stratum, and
f is the overall sampling fraction, which is so small that it is ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample, and calculates standard errors for these estimates using simple formulae. Each replication considers *all but one* clusters in the calculation of the estimates. Pseudo-independent replications are thus created. In the TRCHS, there were 176 non-empty clusters. Hence, 176 replications were created. The variance of a rate r is calculated as follows:

$$SE^2(R) = var(r) = \frac{1}{k(k-1)} \sum_{i=1}^{k} (r_i - r)^2$$

in which

$$r_i = k\,r - (k-1)\,r_{(i)}$$

where r is the estimate computed from the full sample of 251 clusters,
$r_{(I)}$ is the estimate computed from the reduced sample of 250 clusters (i^{th} cluster excluded), and
k is the total number of clusters.

In addition to the standard error, SAMPERR computes the design effect (DEFT) for each estimate, which is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design. SAMPERR also computes the relative error and confidence limits for the estimates.

Sampling errors for the TRCHS are calculated for selected variables considered to be of primary interest. Two set of results, one for women and for men, are presented in this appendix for the country as a whole, for urban and rural areas, for each of the four domains: Mainland, Zanzibar, Pemba and Unguja. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1. Tables B.2 to B.15 present the value of the statistic (R), its standard error (SE), the number of unweighted (N) and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits (R±2SE), for each variable. The DEFT is considered undefined when the standard error considering simple random sample is zero (when the estimate is close to 0 or 1).

In general, the relative standard error for most estimates for the country as a whole is small, except for estimates of very small proportions. There are some differentials in the relative standard error for the estimates of sub-populations. For example, for the variable *using any contraceptive method*, the relative standard errors as a percent of the estimated mean for the whole country, for urban areas, and for rural areas are 4.8 percent, 6.4 percent, and 6.7 percent, respectively.

The confidence interval (e.g., as calculated for the variable *using any method* can be interpreted as follows: the overall national sample proportion is 0.223 and its standard error is .011. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, ie. $0.223 \pm 2 \times .011$. There is a high probability (95 percent) that the *true* proportion of all women 15-59 using a contraceptive method is between 20.1 and 24.5 percent.

Table B.1 List of selected variables for sampling errors, Tanzania 1999

Variable	Estimate	Base Population
WOMEN		
Urban resident	Proportion	All women 15-49
No education	Proportion	All women 15-49
Secondary education or more	Proportion	All women 15-49
Never in union	Proportion	All women 15-49
Currently in union	Proportion	All women 15-49
Ever in union before 20	Proportion	All women 15-49
Sex before 18	Proportion	All women 15-49
Children ever born	Mean	All women 15-49
Children ever born to women over 40	Mean	All women 40-49
Children surviving	Mean	All women 15-49
Knowing any method	Proportion	All women 15-49
Knowing any modern method	Proportion	All women 15-49
Ever used any method	Proportion	All women 15-49
Using any method	Proportion	All women 15-49
Using any modern method	Proportion	All women 15-49
Using pill	Proportion	All women 15-49
Using IUD	Proportion	All women 15-49
Using injectables	Proportion	All women 15-49
Using condom	Proportion	All women 15-49
Using female sterilisation	Proportion	All women 15-49
Currently using abstinence	Proportion	All women 15-49
Using withdrawal	Proportion	All women 15-49
Public source user	Proportion	User modern method
Desires no more children	Proportion	All women 15-49
Wants to delay child at least 2 years	Proportion	All women 15-49
Ideal number of children	Mean	All women 15-49
Mother received tetanus injection	Proportion	Most recent birth in last 5 years
Mother received medical care at birth	Proportion	Birth in last 5 years
Had diarrhoea in the last 2 weeks	Proportion	Children under 5
Treated with ORS packets	Proportion	Children under 5 with diarrhoea in last 2 weeks
Sought medical treatment	Proportion	Children under 5 with diarrhoea in last 2 weeks
Having health card	Proportion	Children 12-23 months
Received BCG vaccination	Proportion	Children 12-23 months
Received DPT vaccination (3 doses)	Proportion	Children 12-23 months
Received polio vaccination (3 doses)	Proportion	Children 12-23 months
Received measles vaccination	Proportion	Children 12-23 months
Fully immunised	Proportion	Children 12-23 months
Total fertility rate (3 years)	Rate	Woman-years of exposure to child bearing
Neonatal mortality rate	Rate	Number of births
Infant mortality rate	Rate	Number of births
Child mortality rate	Rate	Number of births
Under-five mortality rate	Rate	Number of births
Postneonatal mortality rate	Rate	Number of births
MEN		
Urban resident	Proportion	All men 15-59
No education	Proportion	All men 15-59
Secondary education or more	Proportion	All men 15-59
Never in union	Proportion	All men 15-59
Currently in union	Proportion	All men 15-59
Knowing any method	Proportion	All men 15-59
Knowing any modern method	Proportion	All men 15-59
Ever used any method	Proportion	All men 15-59
Using any method	Proportion	All men 15-59
Using any modern method	Proportion	All men 15-59
Using pill	Proportion	All men 15-59
Using IUD	Proportion	All men 15-59
Using injectables	Proportion	All men 15-59
Using condom	Proportion	All men 15-59
Using female sterilisation	Proportion	All men 15-59
Currently using abstinence	Proportion	All men 15-59
Using withdrawal	Proportion	All men 15-59
Ideal number of children	Mean	All men 15-59

Table B.2 Sampling errors for women - Total sample: Tanzania 1999

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: R-2SE	Confidence intervals: R+2SE
Urban resident	0.279	0.029	4029	4029	4.139	0.105	0.220	0.337
No education	0.271	0.019	4029	4029	2.676	0.069	0.234	0.309
Secondary education or more	0.053	0.007	4029	4029	1.950	0.129	0.040	0.067
Never in union	0.234	0.010	4029	4029	1.486	0.042	0.214	0.254
Currently in union	0.658	0.012	4029	4029	1.636	0.019	0.634	0.683
Ever in union before 20	0.669	0.013	3096	3120	1.524	0.019	0.643	0.695
Sex before 18	0.675	0.012	3096	3120	1.399	0.017	0.652	0.699
Children ever born	2.925	0.070	4029	4029	1.543	0.024	2.785	3.065
Children ever born to women over 40	6.687	0.187	590	614	1.511	0.028	6.312	7.062
Children surviving	2.410	0.055	4029	4029	1.437	0.023	2.301	2.519
Knowing any method	0.909	0.014	4029	4029	2.997	0.015	0.882	0.936
Knowing any modern method	0.905	0.015	4029	4029	3.198	0.016	0.875	0.935
Ever used any method	0.405	0.014	4029	4029	1.813	0.035	0.377	0.433
Using any method	0.223	0.011	4029	4029	1.645	0.048	0.201	0.245
Using any modern method	0.156	0.011	4029	4029	1.870	0.068	0.135	0.178
Using pill	0.046	0.005	4029	4029	1.654	0.119	0.035	0.057
Using IUD	0.005	0.001	4029	4029	1.323	0.304	0.002	0.008
Using injectables	0.054	0.006	4029	4029	1.581	0.105	0.042	0.065
Using condom	0.035	0.005	4029	4029	1.777	0.147	0.025	0.045
Using female sterilisation	0.015	0.003	4029	4029	1.318	0.166	0.010	0.020
Currently using abstinence	0.022	0.003	4029	4029	1.264	0.133	0.016	0.028
Using withdrawal	0.025	0.004	4029	4029	1.571	0.155	0.017	0.033
Public source user	0.672	0.033	621	630	1.751	0.049	0.606	0.738
Desires no more children	0.237	0.011	4029	4029	1.587	0.045	0.216	0.258
Wants to delay child at least 2 years	0.311	0.012	4029	4029	1.587	0.037	0.287	0.334
Ideal number of children	5.263	0.078	3911	3916	2.005	0.015	5.106	5.419
Mother received tetanus injection	0.827	0.021	2118	2183	2.653	0.026	0.784	0.870
Mother received medical care at birth	0.438	0.026	3215	3282	2.557	0.060	0.386	0.491
Had diarrhoea in the last 2 weeks	0.124	0.009	2839	2898	1.417	0.073	0.106	0.142
Treated with ORS packets	0.549	0.038	350	358	1.402	0.070	0.472	0.626
Sought medical treatment	0.632	0.036	350	358	1.341	0.056	0.561	0.703
Having health card	0.741	0.038	561	593	2.118	0.052	0.664	0.818
Received BCG vaccination	0.927	0.014	561	593	1.280	0.015	0.899	0.955
Received DPT vaccination (3 doses)	0.810	0.033	561	593	2.018	0.041	0.743	0.876
Received polio vaccination (3 doses)	0.799	0.027	561	593	1.589	0.033	0.746	0.852
Received measles vaccination	0.781	0.030	561	593	1.751	0.039	0.721	0.842
Fully immunised	0.683	0.034	561	593	1.791	0.050	0.615	0.752
Total fertility rate (3 years)	5.554	0.264	NA	11109	2.010	0.047	5.027	6.081
Neonatal mortality rate (5 years)	40.414	4.701	3279	3356	1.281	0.116	31.012	49.815
Infant mortality rate (5 years)	99.139	7.096	3289	3366	1.240	0.072	84.948	113.331
Child mortality rate (5 years)	52.675	6.173	3322	3396	1.472	0.117	40.328	65.022
Under-five mortality rate (5 years)	146.593	9.079	3334	3408	1.362	0.062	128.435	164.750
Postneonatal mortality rate (5 years)	58.726	6.333	3287	3364	1.365	0.108	46.059	71.393

NA = Not applicable

Table B.3 Sampling errors for women - Urban sample: Tanzania 1999

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: R-2SE	Confidence intervals: R+2SE
Urban resident	1.000	0.000	1418	1122	NA	0.000	1.000	1.000
No education	0.132	0.021	1418	1122	2.372	0.161	0.090	0.175
Secondary education or more	0.133	0.023	1418	1122	2.564	0.174	0.087	0.179
Never in union	0.292	0.014	1418	1122	1.198	0.049	0.263	0.321
Currently in union	0.554	0.021	1418	1122	1.570	0.037	0.512	0.595
Ever in union before 20	0.556	0.021	1109	905	1.405	0.038	0.514	0.598
Sex before 18	0.618	0.020	1109	905	1.339	0.032	0.579	0.657
Children ever born	2.161	0.078	1418	1122	1.324	0.036	2.005	2.318
Children ever born to women over 40	5.334	0.339	189	147	1.710	0.064	4.656	6.012
Children surviving	1.814	0.067	1418	1122	1.338	0.037	1.679	1.948
Knowing any method	0.976	0.006	1418	1122	1.455	0.006	0.964	0.988
Knowing any modern method	0.975	0.006	1418	1122	1.456	0.006	0.963	0.987
Ever used any method	0.567	0.017	1418	1122	1.281	0.030	0.534	0.601
Using any method	0.330	0.021	1418	1122	1.682	0.064	0.288	0.372
Using any modern method	0.289	0.017	1418	1122	1.421	0.059	0.255	0.323
Using pill	0.089	0.013	1418	1122	1.783	0.152	0.062	0.115
Using IUD	0.012	0.004	1418	1122	1.336	0.322	0.004	0.020
Using injectables	0.099	0.013	1418	1122	1.596	0.128	0.073	0.124
Using condom	0.067	0.015	1418	1122	2.239	0.221	0.037	0.097
Using female sterilisation	0.018	0.006	1418	1122	1.688	0.333	0.006	0.030
Currently using abstinence	0.028	0.007	1418	1122	1.549	0.242	0.014	0.042
Using withdrawal	0.008	0.003	1418	1122	1.178	0.340	0.003	0.014
Public source user	0.636	0.043	366	324	1.692	0.067	0.551	0.722
Desires no more children	0.220	0.027	1418	1122	2.431	0.122	0.166	0.273
Wants to delay child at least 2 years	0.323	0.021	1418	1122	1.675	0.064	0.282	0.365
Ideal number of children	4.309	0.097	1388	1107	1.938	0.022	4.115	4.503
Mother received tetanus injection	0.914	0.018	616	502	1.606	0.020	0.878	0.950
Mother received medical care at birth	0.833	0.031	820	614	2.007	0.037	0.772	0.895
Had diarrhoea in the last 2 weeks	0.098	0.014	741	546	1.225	0.138	0.071	0.125
Treated with ORS packets	0.510	0.088	75	54	1.448	0.173	0.334	0.686
Sought medical treatment	0.701	0.086	75	54	1.542	0.123	0.529	0.873
Having health card	0.696	0.063	148	112	1.632	0.091	0.570	0.823
Received BCG vaccination	1.000	0.000	148	112	NA	0.000	1.000	1.000
Received DPT vaccination (3 doses)	0.899	0.062	148	112	2.435	0.069	0.775	1.000
Received polio vaccination (3 doses)	0.848	0.060	148	112	1.981	0.071	0.729	0.968
Received measles vaccination	0.903	0.034	148	112	1.346	0.037	0.835	0.970
Fully immunised	0.805	0.059	148	112	1.754	0.073	0.688	0.922
Total fertility rate (3 years)	3.160	0.282	NA	3173	2.180	0.089	2.597	3.724
Neonatal mortality rate (10 years)	51.979	7.385	1635	1257	1.207	0.142	37.209	66.749
Infant mortality rate (10 years)	87.274	9.326	1636	1258	1.242	0.107	68.622	105.927
Child mortality rate (10 years)	59.557	8.442	1644	1267	1.249	0.142	42.673	76.440
Under-five mortality rate (10 years)	141.633	11.042	1646	1269	1.252	0.078	119.550	163.716
Postneonatal mortality rate (10 years)	35.296	9.903	1635	1256	2.159	0.281	15.489	55.102

NA = Not applicable

Table B.4 Sampling errors for women - Rural sample: Tanzania 1999

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: R-2SE	Confidence intervals: R+2SE
Urban resident	0.000	0.000	2611	2907	NA	NA	0.000	0.000
No education	0.325	0.022	2611	2907	2.417	0.068	0.281	0.369
Secondary education or more	0.023	0.003	2611	2907	1.099	0.141	0.016	0.029
Never in union	0.212	0.012	2611	2907	1.464	0.055	0.188	0.235
Currently in union	0.699	0.012	2611	2907	1.371	0.018	0.674	0.723
Ever in union before 20	0.715	0.014	1987	2215	1.339	0.019	0.688	0.742
Sex before 18	0.699	0.014	1987	2215	1.351	0.020	0.671	0.727
Children ever born	3.220	0.073	2611	2907	1.230	0.023	3.074	3.367
Children ever born to women over 40	7.114	0.193	401	467	1.298	0.027	6.729	7.500
Children surviving	2.640	0.055	2611	2907	1.109	0.021	2.529	2.750
Knowing any method	0.883	0.018	2611	2907	2.844	0.020	0.847	0.919
Knowing any modern method	0.878	0.020	2611	2907	3.046	0.022	0.839	0.917
Ever used any method	0.343	0.017	2611	2907	1.792	0.049	0.310	0.376
Using any method	0.182	0.012	2611	2907	1.604	0.067	0.157	0.206
Using any modern method	0.105	0.011	2611	2907	1.894	0.108	0.082	0.128
Using pill	0.030	0.004	2611	2907	1.346	0.151	0.021	0.039
Using IUD	0.002	0.001	2611	2907	1.231	0.561	0.000	0.004
Using injectables	0.036	0.006	2611	2907	1.528	0.154	0.025	0.047
Using condom	0.022	0.004	2611	2907	1.531	0.198	0.013	0.031
Using female sterilisation	0.014	0.003	2611	2907	1.149	0.186	0.009	0.020
Currently using abstinence	0.020	0.003	2611	2907	1.140	0.157	0.014	0.026
Using withdrawal	0.031	0.005	2611	2907	1.472	0.161	0.021	0.041
Public source user	0.710	0.050	255	305	1.774	0.071	0.609	0.811
Desires no more children	0.244	0.010	2611	2907	1.195	0.041	0.224	0.264
Wants to delay child at least 2 years	0.306	0.014	2611	2907	1.549	0.046	0.278	0.334
Ideal number of children	5.638	0.077	2523	2809	1.532	0.014	5.483	5.793
Mother received tetanus injection	0.801	0.026	1502	1681	2.578	0.033	0.748	0.854
Mother received medical care at birth	0.348	0.024	2395	2668	2.092	0.070	0.299	0.396
Had diarrhoea in the last 2 weeks	0.129	0.011	2098	2353	1.395	0.083	0.108	0.151
Treated with ORS packets	0.555	0.042	275	304	1.344	0.076	0.471	0.640
Sought medical treatment	0.620	0.039	275	304	1.262	0.063	0.543	0.698
Having health card	0.751	0.045	413	481	2.132	0.060	0.661	0.841
Received BCG vaccination	0.910	0.016	413	481	1.165	0.018	0.877	0.943
Received DPT vaccination (3 doses)	0.789	0.039	413	481	1.917	0.049	0.712	0.866
Received polio vaccination (3 doses)	0.788	0.029	413	481	1.474	0.037	0.729	0.847
Received measles vaccination	0.753	0.036	413	481	1.677	0.047	0.682	0.824
Fully immunised	0.655	0.039	413	481	1.694	0.059	0.577	0.733
Total fertility rate (3 years)	6.483	0.220	NA	7935	1.397	0.034	6.043	6.923
Neonatal mortality rate (10 years)	43.444	4.475	4571	4999	1.340	0.103	34.493	52.395
Infant mortality rate (10 years)	112.951	7.905	4581	5009	1.479	0.070	97.142	128.761
Child mortality rate (10 years)	59.728	5.925	4619	5057	1.354	0.099	47.877	71.579
Under-five mortality rate (10 years)	165.933	10.738	4630	5068	1.669	0.065	144.457	187.409
Postneonatal mortality rate (10 years)	69.507	5.792	4580	5008	1.329	0.083	57.924	81.091

NA = Not applicable

Table B.5 Sampling errors for women - Mainland sample: Tanzania 1999

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: R-2SE	Confidence intervals: R+2SE
Urban resident	0.277	0.030	3060	3929	3.709	0.108	0.217	0.337
No education	0.271	0.019	3060	3929	2.391	0.071	0.233	0.309
Secondary education or more	0.046	0.007	3060	3929	1.845	0.152	0.032	0.060
Never in union	0.234	0.010	3060	3929	1.328	0.044	0.213	0.254
Currently in union	0.659	0.013	3060	3929	1.463	0.019	0.634	0.684
Ever in union before 20	0.666	0.013	2367	3045	1.360	0.020	0.640	0.693
Sex before 18	0.678	0.012	2367	3045	1.256	0.018	0.653	0.702
Children ever born	2.915	0.072	3060	3929	1.382	0.025	2.772	3.058
Children ever born to women over 40	6.673	0.191	463	601	1.368	0.029	6.291	7.056
Children surviving	2.398	0.056	3060	3929	1.286	0.023	2.287	2.510
Knowing any method	0.908	0.014	3060	3929	2.665	0.015	0.880	0.936
Knowing any modern method	0.904	0.015	3060	3929	2.844	0.017	0.874	0.934
Ever used any method	0.408	0.014	3060	3929	1.616	0.035	0.379	0.437
Using any method	0.225	0.011	3060	3929	1.462	0.049	0.203	0.247
Using any modern method	0.157	0.011	3060	3929	1.663	0.070	0.136	0.179
Using pill	0.046	0.006	3060	3929	1.478	0.122	0.035	0.057
Using IUD	0.005	0.001	3060	3929	1.184	0.313	0.002	0.008
Using injectables	0.054	0.006	3060	3929	1.408	0.107	0.042	0.065
Using condom	0.035	0.005	3060	3929	1.572	0.148	0.025	0.046
Using female sterilisation	0.016	0.003	3060	3929	1.168	0.168	0.010	0.021
Currently using abstinence	0.022	0.003	3060	3929	1.123	0.134	0.016	0.028
Using withdrawal	0.025	0.004	3060	3929	1.393	0.157	0.017	0.033
Public source user	0.671	0.034	509	619	1.609	0.050	0.604	0.738
Desires no more children	0.239	0.011	3060	3929	1.416	0.046	0.217	0.261
Wants to delay child at least 2 years	0.310	0.012	3060	3929	1.419	0.038	0.286	0.333
Ideal number of children	5.224	0.080	2975	3820	1.810	0.015	5.064	5.384
Mother received tetanus injection	0.827	0.022	1619	2131	2.372	0.027	0.783	0.871
Mother received medical care at birth	0.439	0.027	2406	3196	2.288	0.062	0.385	0.493
Had diarrhoea in the last 2 weeks	0.124	0.009	2107	2820	1.265	0.075	0.105	0.142
Treated with ORS packets	0.555	0.039	269	349	1.251	0.071	0.476	0.634
Sought medical treatment	0.636	0.036	269	349	1.199	0.057	0.563	0.709
Having health card	0.740	0.039	426	578	1.890	0.053	0.662	0.819
Received BCG vaccination	0.926	0.014	426	578	1.132	0.016	0.897	0.955
Received DPT vaccination (3 doses)	0.809	0.034	426	578	1.800	0.042	0.741	0.878
Received polio vaccination (3 doses)	0.799	0.027	426	578	1.416	0.034	0.744	0.853
Received measles vaccination	0.782	0.031	426	578	1.565	0.040	0.720	0.844
Fully immunised	0.683	0.035	426	578	1.599	0.052	0.612	0.753
Total fertility rate (3 years)	5.55	0.270	NA	NA	1.798	0.049	5.010	6.090
Neonatal mortality rate (10 years)	45.440	4.004	4612	6086	1.206	0.088	37.431	53.448
Infant mortality rate (10 years)	108.483	6.851	4622	6097	1.354	0.063	94.781	122.184
Child mortality rate (10 years)	60.472	5.101	4659	6152	1.202	0.084	50.270	70.674
Under-five mortality rate (10 years)	162.394	9.031	4671	6166	1.484	0.056	144.332	180.457
Postneonatal mortality rate (10 years)	63.043	5.518	4620	6094	1.390	0.088	52.007	74.079

NA = Not applicable

Table B.6 Sampling errors for women - Zanzibar sample: Tanzania 1999

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: R-2SE	Confidence intervals: R+2SE
Urban resident	0.344	0.027	969	100	1.752	0.078	0.291	0.398
No education	0.284	0.020	969	100	1.348	0.069	0.244	0.323
Secondary education or more	0.338	0.018	969	100	1.213	0.055	0.301	0.375
Never in union	0.259	0.021	969	100	1.469	0.080	0.218	0.300
Currently in union	0.618	0.021	969	100	1.332	0.034	0.576	0.659
Ever in union before 20	0.772	0.014	729	75	0.895	0.018	0.744	0.799
Sex before 18	0.587	0.025	729	75	1.360	0.042	0.537	0.637
Children ever born	3.335	0.098	969	100	0.922	0.029	3.138	3.532
Children ever born to women over 40	7.319	0.303	127	13	1.055	0.041	6.712	7.926
Children surviving	2.859	0.094	969	100	1.023	0.033	2.671	3.047
Knowing any method	0.947	0.008	969	100	1.151	0.009	0.930	0.963
Knowing any modern method	0.944	0.009	969	100	1.166	0.009	0.927	0.961
Ever used any method	0.301	0.020	969	100	1.341	0.066	0.261	0.340
Using any method	0.136	0.011	969	100	1.002	0.081	0.114	0.158
Using any modern method	0.109	0.011	969	100	1.064	0.098	0.088	0.131
Using pill	0.048	0.008	969	100	1.202	0.173	0.031	0.064
Using IUD	0.006	0.002	969	100	0.767	0.330	0.002	0.009
Using injectables	0.039	0.006	969	100	0.969	0.155	0.027	0.051
Using condom	0.011	0.003	969	100	0.917	0.279	0.005	0.017
Using female sterilisation	0.007	0.003	969	100	1.244	0.494	0.000	0.013
Currently using abstinence	0.012	0.004	969	100	1.058	0.305	0.005	0.020
Using withdrawal	0.009	0.003	969	100	1.145	0.395	0.002	0.015
Public source user	0.739	0.076	112	11	1.829	0.103	0.587	0.892
Desires no more children	0.169	0.014	969	100	1.134	0.081	0.141	0.196
Wants to delay child at least 2 years	0.349	0.019	969	100	1.217	0.053	0.312	0.386
Ideal number of children	6.796	0.138	936	96	1.342	0.020	6.520	7.071
Mother received tetanus injection	0.812	0.013	499	52	0.770	0.016	0.785	0.839
Mother received medical care at birth	0.412	0.024	809	86	1.133	0.057	0.365	0.459
Had diarrhoea in the last 2 weeks	0.116	0.014	732	78	1.229	0.124	0.087	0.145
Treated with ORS packets	0.294	0.051	81	9	0.976	0.174	0.192	0.397
Sought medical treatment	0.477	0.075	81	9	1.365	0.157	0.327	0.627
Having health card	0.756	0.042	135	15	1.150	0.055	0.673	0.840
Received BCG vaccination	0.978	0.017	135	15	1.401	0.018	0.944	1.000
Received DPT vaccination (3 doses)	0.833	0.025	135	15	0.780	0.030	0.784	0.882
Received polio vaccination (3 doses)	0.828	0.026	135	15	0.825	0.032	0.776	0.881
Received measles vaccination	0.750	0.059	135	15	1.613	0.079	0.631	0.868
Fully immunised	0.700	0.044	135	15	1.129	0.063	0.612	0.788
Total fertility rate	5.582	0.388	NA	NA	1.567	0.069	4.809	6.361
Neonatal mortality rate (10 years)	35.154	5.349	1594	170	1.058	0.152	24.455	45.853
Infant mortality rate (10 years)	83.049	7.709	1595	170	0.991	0.093	67.630	98.468
Child mortality rate (10 years)	34.113	6.310	1604	171	1.213	0.185	21.493	46.732
Under-five mortality rate (10 years)	114.328	10.276	1605	171	1.175	0.090	93.776	134.881
Postneonatal mortality rate (10 years)	47.895	5.779	1595	170	0.946	0.121	36.336	59.454

NA = Not applicable

Table B.7 Sampling errors for women - Pemba sample: Tanzania 1999

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: R-2SE	Confidence intervals: R+2SE
Urban resident	0.160	0.021	396	44	1.130	0.130	0.118	0.202
No education	0.393	0.032	396	44	1.282	0.080	0.330	0.456
Secondary education or more	0.232	0.031	396	44	1.469	0.134	0.170	0.294
Never in union	0.264	0.035	396	44	1.593	0.134	0.193	0.335
Currently in union	0.624	0.039	396	44	1.590	0.062	0.547	0.702
Ever in union before 20	0.791	0.018	290	32	0.761	0.023	0.755	0.827
Sex before 18	0.565	0.046	290	32	1.587	0.082	0.473	0.658
Children ever born	3.618	0.108	396	44	0.614	0.030	3.403	3.834
Children ever born to women over 40	7.700	0.362	49	5	0.798	0.047	6.975	8.424
Children surviving	3.112	0.093	396	44	0.613	0.030	2.926	3.297
Knowing any method	0.924	0.014	396	44	1.080	0.016	0.895	0.953
Knowing any modern method	0.920	0.015	396	44	1.130	0.017	0.889	0.951
Ever used any method	0.178	0.013	396	44	0.684	0.074	0.151	0.204
Using any method	0.068	0.009	396	44	0.681	0.126	0.051	0.086
Using any modern method	0.049	0.011	396	44	1.030	0.229	0.027	0.071
Using pill	0.011	0.002	396	44	0.432	0.205	0.007	0.016
Using IUD	0.002	0.002	396	44	0.923	1.020	0.000	0.006
Using injectables	0.025	0.010	396	44	1.301	0.410	0.004	0.045
Using condom	0.000	0.000	396	44	NA	NA	0.000	0.000
Using female sterilisation	0.011	0.007	396	44	1.311	0.631	0.000	0.024
Currently using abstinence	0.010	0.004	396	44	0.803	0.400	0.002	0.018
Using withdrawal	0.008	0.005	396	44	1.236	0.710	0.000	0.018
Public source user	1.000	0.000	22	2	NA	0.000	1.000	1.000
Desires no more children	0.155	0.022	396	44	1.201	0.141	0.111	0.198
Wants to delay child at least 2 years	0.368	0.023	396	44	0.930	0.061	0.323	0.413
Ideal number of children	8.069	0.183	377	41	1.031	0.023	7.704	8.435
Mother received tetanus injection	0.786	0.023	213	24	0.842	0.030	0.739	0.833
Mother received medical care at birth	0.287	0.019	361	42	0.688	0.067	0.248	0.326
Had diarrhoea in the last 2 weeks	0.163	0.018	324	38	0.901	0.111	0.127	0.200
Treated with ORS packets	0.373	0.057	50	6	0.806	0.152	0.260	0.486
Sought medical treatment	0.474	0.096	50	6	1.395	0.203	0.281	0.666
Having health card	0.665	0.056	65	8	0.965	0.085	0.552	0.777
Received BCG vaccination	0.958	0.033	65	8	1.354	0.035	0.891	1.000
Received DPT vaccination (3 doses)	0.716	0.051	65	8	0.915	0.071	0.614	0.817
Received polio vaccination (3 doses)	0.706	0.047	65	8	0.844	0.067	0.612	0.801
Received measles vaccination	0.615	0.098	65	8	1.620	0.159	0.419	0.810
Fully immunised	0.518	0.060	65	8	0.962	0.116	0.398	0.639

NA = Not applicable

Table B.8 Sampling errors for women - Unguja sample: Tanzania 1999

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: R-2SE	Confidence intervals: R+2SE
Urban resident	0.488	0.036	573	56	1.739	0.074	0.415	0.561
No education	0.198	0.023	573	56	1.353	0.114	0.153	0.244
Secondary education or more	0.421	0.021	573	56	1.033	0.051	0.378	0.464
Never in union	0.255	0.024	573	56	1.325	0.095	0.207	0.303
Currently in union	0.613	0.022	573	56	1.059	0.035	0.570	0.656
Ever in union before 20	0.757	0.021	439	43	1.008	0.027	0.716	0.798
Sex before 18	0.603	0.024	439	43	1.031	0.040	0.555	0.651
Children ever born	3.114	0.152	573	56	1.146	0.049	2.810	3.417
Children ever born to women over 40	7.058	0.445	78	8	1.199	0.063	6.169	7.947
Children surviving	2.661	0.149	573	56	1.310	0.056	2.364	2.959
Knowing any method	0.965	0.008	573	56	1.054	0.008	0.948	0.981
Knowing any modern method	0.963	0.007	573	56	0.942	0.008	0.948	0.978
Ever used any method	0.397	0.029	573	56	1.413	0.073	0.339	0.454
Using any method	0.189	0.017	573	56	1.068	0.092	0.154	0.224
Using any modern method	0.156	0.014	573	56	0.933	0.091	0.128	0.185
Using pill	0.076	0.014	573	56	1.223	0.178	0.049	0.103
Using IUD	0.008	0.003	573	56	0.705	0.323	0.003	0.014
Using injectables	0.049	0.007	573	56	0.774	0.142	0.035	0.063
Using condom	0.020	0.005	573	56	0.938	0.277	0.009	0.031
Using female sterilisation	0.003	0.002	573	56	0.999	0.741	0.000	0.008
Currently using abstinence	0.014	0.006	573	56	1.206	0.425	0.002	0.026
Using withdrawal	0.009	0.004	573	56	1.092	0.469	0.001	0.018
Public source user	0.676	0.092	90	9	1.863	0.137	0.491	0.861
Desires no more children	0.180	0.017	573	56	1.044	0.093	0.146	0.213
Wants to delay child at least 2 years	0.334	0.027	573	56	1.354	0.080	0.281	0.388
Ideal number of children	5.833	0.194	559	55	1.827	0.033	5.445	6.220
Mother received tetanus injection	0.834	0.013	286	28	0.616	0.016	0.807	0.861
Mother received medical care at birth	0.529	0.037	448	45	1.309	0.069	0.456	0.603
Had diarrhoea in the last 2 weeks	0.072	0.014	408	40	1.068	0.188	0.045	0.099
Treated with ORS packets	0.126	0.067	31	3	1.088	0.528	0.000	0.260
Sought medical treatment	0.484	0.114	31	3	1.214	0.236	0.256	0.712
Having health card	0.854	0.059	70	7	1.409	0.069	0.736	0.972
Received BCG vaccination	1.000	0.000	70	7	NA	0.000	1.000	1.000
Received DPT vaccination (3 doses)	0.958	0.028	70	7	1.162	0.029	0.903	1.000
Received polio vaccination (3 doses)	0.958	0.028	70	7	1.162	0.029	0.903	1.000
Received measles vaccination	0.894	0.038	70	7	1.056	0.043	0.817	0.970
Fully immunised	0.894	0.038	70	7	1.056	0.043	0.817	0.970

NA = Not applicable

Table B.9 Sampling errors for men - Total sample: Tanzania 1999

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: R-2SE	Confidence intervals: R+2SE
Urban resident	0.266	0.022	3542	3542	2.989	0.083	0.221	0.310
No education	0.140	0.011	3542	3542	1.819	0.076	0.119	0.161
Secondary education or more	0.071	0.006	3542	3542	1.338	0.082	0.059	0.082
Never in union	0.364	0.012	3542	3542	1.440	0.032	0.341	0.387
Currently in union	0.582	0.014	3542	3542	1.686	0.024	0.555	0.610
Knowing any method	0.928	0.006	3542	3542	1.490	0.007	0.915	0.941
Knowing any modern method	0.920	0.006	3542	3542	1.267	0.006	0.909	0.932
Ever used any method	0.482	0.015	3542	3542	1.806	0.031	0.451	0.512
Using any method	0.293	0.012	3542	3542	1.623	0.042	0.268	0.318
Using any modern method	0.208	0.013	3542	3542	1.890	0.062	0.182	0.234
Using pill	0.040	0.006	3542	3542	1.871	0.153	0.028	0.053
Using IUD	0.003	0.001	3542	3542	1.166	0.384	0.001	0.005
Using injectables	0.031	0.004	3542	3542	1.444	0.136	0.023	0.039
Using condom	0.120	0.010	3542	3542	1.863	0.085	0.100	0.140
Using female sterilisation	0.014	0.003	3542	3542	1.354	0.194	0.008	0.019
Currently using abstinence	0.041	0.005	3542	3542	1.401	0.114	0.031	0.050
Using withdrawal	0.024	0.003	3542	3542	1.162	0.124	0.018	0.030
Ideal number of children	5.609	0.138	3379	3409	2.271	0.025	5.332	5.885

NA = Not applicable

Table B.10 Sampling errors for men - Urban sample: Tanzania 1999

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: R-2SE	Confidence intervals: R+2SE
Urban resident	1.000	0.000	1250	941	NA	0.000	1.000	1.000
No education	0.070	0.019	1250	941	2.604	0.268	0.033	0.108
Secondary education or more	0.165	0.020	1250	941	1.911	0.122	0.125	0.205
Never in union	0.406	0.025	1250	941	1.823	0.062	0.355	0.456
Currently in union	0.535	0.031	1250	941	2.187	0.058	0.473	0.597
Knowing any method	0.973	0.006	1250	941	1.403	0.007	0.961	0.986
Knowing any modern method	0.968	0.007	1250	941	1.471	0.008	0.953	0.982
Ever used any method	0.608	0.030	1250	941	2.164	0.049	0.548	0.668
Using any method	0.385	0.023	1250	941	1.674	0.060	0.339	0.431
Using any modern method	0.318	0.029	1250	941	2.180	0.090	0.260	0.375
Using pill	0.068	0.019	1250	941	2.653	0.277	0.030	0.106
Using IUD	0.006	0.002	1250	941	1.058	0.394	0.001	0.010
Using injectables	0.039	0.009	1250	941	1.679	0.235	0.021	0.058
Using condom	0.190	0.023	1250	941	2.050	0.120	0.145	0.236
Using female sterilisation	0.012	0.007	1250	941	2.161	0.546	0.000	0.026
Currently using abstinence	0.041	0.009	1250	941	1.589	0.218	0.023	0.059
Using withdrawal	0.014	0.003	1250	941	0.842	0.198	0.009	0.020
Ideal number of children	4.327	0.111	1194	909	1.727	0.026	4.105	4.550

NA = Not applicable

Table B.11 Sampling errors for men - Rural sample: Tanzania 1999

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: R-2SE	Confidence intervals: R+2SE
Urban resident	0.000	0.000	2292	2601	NA	NA	0.000	0.000
No education	0.165	0.013	2292	2601	1.628	0.077	0.140	0.190
Secondary education or more	0.036	0.004	2292	2601	1.049	0.113	0.028	0.044
Never in union	0.349	0.013	2292	2601	1.307	0.037	0.323	0.375
Currently in union	0.600	0.015	2292	2601	1.513	0.026	0.569	0.631
Knowing any method	0.911	0.008	2292	2601	1.388	0.009	0.894	0.927
Knowing any modern method	0.903	0.007	2292	2601	1.171	0.008	0.889	0.918
Ever used any method	0.436	0.017	2292	2601	1.594	0.038	0.403	0.469
Using any method	0.260	0.014	2292	2601	1.506	0.053	0.232	0.288
Using any modern method	0.168	0.013	2292	2601	1.674	0.078	0.142	0.195
Using pill	0.030	0.004	2292	2601	1.256	0.148	0.021	0.039
Using IUD	0.001	0.001	2292	2601	1.357	0.741	0.000	0.004
Using injectables	0.028	0.005	2292	2601	1.329	0.163	0.019	0.037
Using condom	0.095	0.011	2292	2601	1.840	0.119	0.072	0.117
Using female sterilisation	0.014	0.003	2292	2601	1.076	0.188	0.009	0.019
Currently using abstinence	0.041	0.005	2292	2601	1.323	0.134	0.030	0.051
Using withdrawal	0.028	0.004	2292	2601	1.143	0.142	0.020	0.035
Ideal number of children	6.075	0.174	2185	2500	2.135	0.029	5.727	6.422

NA = Not applicable

Table B.12 Sampling errors for men - Mainland sample: Tanzania 1999

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: R-2SE	Confidence intervals: R+2SE
Urban resident	0.263	0.023	2673	3452	2.674	0.087	0.218	0.309
No education	0.139	0.011	2673	3452	1.626	0.078	0.117	0.161
Secondary education or more	0.063	0.006	2673	3452	1.223	0.091	0.052	0.075
Never in union	0.363	0.012	2673	3452	1.283	0.033	0.339	0.387
Currently in union	0.583	0.014	2673	3452	1.502	0.025	0.555	0.612
Knowing any method	0.927	0.007	2673	3452	1.321	0.007	0.913	0.940
Knowing any modern method	0.919	0.006	2673	3452	1.123	0.006	0.907	0.931
Ever used any method	0.487	0.016	2673	3452	1.605	0.032	0.456	0.518
Using any method	0.297	0.013	2673	3452	1.439	0.043	0.271	0.322
Using any modern method	0.211	0.013	2673	3452	1.674	0.063	0.184	0.237
Using pill	0.040	0.006	2673	3452	1.669	0.158	0.028	0.053
Using IUD	0.003	0.001	2673	3452	1.035	0.391	0.001	0.005
Using injectables	0.031	0.004	2673	3452	1.277	0.137	0.023	0.040
Using condom	0.122	0.010	2673	3452	1.649	0.086	0.101	0.143
Using female sterilisation	0.014	0.003	2673	3452	1.193	0.194	0.008	0.019
Currently using abstinence	0.041	0.005	2673	3452	1.244	0.116	0.031	0.050
Using withdrawal	0.024	0.003	2673	3452	1.032	0.127	0.018	0.030
Ideal number of children	5.548	0.141	2577	3325	2.074	0.025	5.266	5.830

NA = Not applicable

Table B.13 Sampling errors for men - Zanzibar sample: Tanzania 1999

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: R-2SE	Confidence intervals: R+2SE
Urban resident	0.356	0.032	869	90	1.951	0.089	0.293	0.420
No education	0.176	0.014	869	90	1.052	0.077	0.148	0.203
Secondary education or more	0.341	0.019	869	90	1.174	0.055	0.303	0.379
Never in union	0.406	0.018	869	90	1.071	0.044	0.371	0.442
Currently in union	0.549	0.016	869	90	0.922	0.028	0.518	0.581
Knowing any method	0.962	0.006	869	90	0.992	0.007	0.949	0.975
Knowing any modern method	0.962	0.006	869	90	0.992	0.007	0.949	0.975
Ever used any method	0.289	0.016	869	90	1.011	0.054	0.258	0.320
Using any method	0.164	0.011	869	90	0.897	0.069	0.142	0.187
Using any modern method	0.113	0.008	869	90	0.780	0.074	0.097	0.130
Using pill	0.043	0.005	869	90	0.788	0.126	0.032	0.054
Using IUD	0.002	0.001	869	90	0.927	0.717	0.000	0.005
Using injectables	0.014	0.002	869	90	0.600	0.172	0.009	0.019
Using condom	0.052	0.006	869	90	0.765	0.110	0.041	0.064
Using female sterilisation	0.002	0.002	869	90	1.010	0.729	0.000	0.005
Currently using abstinence	0.028	0.005	869	90	0.923	0.184	0.018	0.038
Using withdrawal	0.017	0.004	869	90	0.815	0.207	0.010	0.025
Ideal number of children	8.056	0.408	802	83	2.090	0.051	7.240	8.871

NA = Not applicable

Table B.14 Sampling errors for men - Pemba sample: Tanzania 1999

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: R-2SE	Confidence intervals: R+2SE
Urban resident	0.151	0.020	316	36	0.985	0.132	0.111	0.190
No education	0.262	0.024	316	36	0.966	0.091	0.215	0.310
Secondary education or more	0.306	0.030	316	36	1.159	0.098	0.246	0.366
Never in union	0.353	0.032	316	36	1.204	0.092	0.288	0.418
Currently in union	0.619	0.027	316	36	0.986	0.044	0.565	0.673
Knowing any method	0.954	0.011	316	36	0.945	0.012	0.932	0.977
Knowing any modern method	0.954	0.011	316	36	0.945	0.012	0.932	0.977
Ever used any method	0.171	0.018	316	36	0.836	0.104	0.136	0.207
Using any method	0.099	0.011	316	36	0.626	0.107	0.078	0.120
Using any modern method	0.037	0.005	316	36	0.430	0.124	0.028	0.046
Using pill	0.014	0.006	316	36	0.861	0.404	0.003	0.026
Using IUD	0.003	0.003	316	36	0.910	1.010	0.000	0.008
Using injectables	0.005	0.001	316	36	0.168	0.132	0.004	0.006
Using condom	0.010	0.007	316	36	1.197	0.688	0.000	0.023
Using female sterilisation	0.006	0.004	316	36	1.016	0.764	0.000	0.014
Currently using abstinence	0.036	0.010	316	36	0.996	0.289	0.015	0.057
Using withdrawal	0.017	0.005	316	36	0.694	0.294	0.007	0.028
Ideal number of children	10.791	0.647	288	33	1.815	0.060	9.497	12.085

NA = Not applicable

Table B.15 Sampling errors for men - Unguja sample: Tanzania 1999

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: R-2SE	Confidence intervals: R+2SE
Urban resident	0.490	0.039	553	55	1.835	0.080	0.412	0.568
No education	0.119	0.015	553	55	1.117	0.129	0.088	0.150
Secondary education or more	0.363	0.025	553	55	1.224	0.069	0.313	0.413
Never in union	0.441	0.017	553	55	0.801	0.038	0.407	0.475
Currently in union	0.504	0.016	553	55	0.743	0.031	0.472	0.535
Knowing any method	0.967	0.008	553	55	1.046	0.008	0.951	0.983
Knowing any modern method	0.967	0.008	553	55	1.046	0.008	0.951	0.983
Ever used any method	0.365	0.020	553	55	0.984	0.055	0.325	0.406
Using any method	0.207	0.016	553	55	0.927	0.077	0.175	0.239
Using any modern method	0.163	0.012	553	55	0.734	0.071	0.140	0.186
Using pill	0.062	0.008	553	55	0.761	0.126	0.046	0.077
Using IUD	0.002	0.002	553	55	0.925	1.015	0.000	0.005
Using injectables	0.020	0.004	553	55	0.632	0.191	0.012	0.027
Using condom	0.080	0.008	553	55	0.717	0.103	0.064	0.097
Using female sterilisation	0.000	0.000	553	55	NA	NA	0.000	0.000
Currently using abstinence	0.023	0.005	553	55	0.838	0.234	0.012	0.033
Using withdrawal	0.018	0.005	553	55	0.891	0.284	0.008	0.028
Ideal number of children	6.298	0.229	514	51	1.196	0.036	5.841	6.756

NA = Not applicable

DATA QUALITY TABLES

APPENDIX C

Table C.1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), Tanzania 1999

	Males		Females			Males		Females	
Age	Number	Percent	Number	Percent	Age	Number	Percent	Number	Percent
0	320	3.8	353	3.8	37	74	0.9	82	0.9
1	334	4.0	261	2.8	38	80	1.0	88	1.0
2	302	3.6	288	3.1	39	92	1.1	69	0.7
3	264	3.2	296	3.2	40	81	1.0	97	1.1
4	291	3.5	298	3.2	41	40	0.5	58	0.6
5	275	3.3	286	3.1	42	45	0.5	57	0.6
6	324	3.9	251	2.7	43	31	0.4	42	0.5
7	284	3.4	296	3.2	44	33	0.4	33	0.4
8	297	3.5	286	3.1	45	78	0.9	78	0.8
9	266	3.2	285	3.1	46	34	0.4	50	0.5
10	255	3.1	244	2.6	47	61	0.7	72	0.8
11	210	2.5	239	2.6	48	39	0.5	58	0.6
12	277	3.3	256	2.8	49	55	0.7	51	0.6
13	269	3.2	250	2.7	50	68	0.8	43	0.5
14	186	2.2	197	2.1	51	39	0.5	51	0.6
15	199	2.4	212	2.3	52	33	0.4	96	1.0
16	172	2.1	213	2.3	53	42	0.5	61	0.7
17	150	1.8	197	2.1	54	34	0.4	51	0.6
18	126	1.5	147	1.6	55	37	0.4	73	0.8
19	171	2.0	163	1.8	56	29	0.3	61	0.7
20	167	2.0	188	2.0	57	40	0.5	26	0.3
21	92	1.1	155	1.7	58	37	0.4	43	0.5
22	99	1.2	186	2.0	59	24	0.3	15	0.2
23	118	1.4	153	1.7	60	32	0.4	92	1.0
24	96	1.1	156	1.7	61	20	0.2	29	0.3
25	143	1.7	188	2.0	62	57	0.7	49	0.5
26	99	1.2	149	1.6	63	25	0.3	28	0.3
27	108	1.3	148	1.6	64	27	0.3	13	0.1
28	87	1.0	131	1.4	65	56	0.7	61	0.7
29	119	1.4	133	1.4	66	35	0.4	17	0.2
30	105	1.2	146	1.6	67	32	0.4	14	0.2
31	79	0.9	104	1.1	68	35	0.4	33	0.4
32	66	0.8	79	0.9	69	26	0.3	19	0.2
33	69	0.8	94	1.0	70+	214	2.6	187	2.0
34	67	0.8	89	1.0	Don't know,				
35	122	1.5	143	1.5	missing	1	0.0	1	0.0
36	75	0.9	86	0.9					
					Total	8,366	100.0	9,242	100.0

Table C.2 Age distribution of eligible and interviewed women

Percent distribution of the de facto household population of women age 10-54, and of interviewed women age 15-49, and of interviewed women age 15-49, and percentage of eligible women who were interviewed (weighted) by five-year groups, Tanzania 1999

	Household population of women age 10-54		Interviewed women age 15-49		Percentage of eligible women interviewed (weighted)
	Number	Percent	Number	Percent	
10-14	1,185	NA	NA	NA	NA
15-19	931	22.7	906	22.6	97.3
20-24	838	20.5	817	20.3	97.5
25-29	749	18.3	740	18.4	98.9
30-34	511	12.5	504	12.5	98.5
25-39	468	11.4	463	11.5	98.9
40-44	287	7.0	283	7.0	98.5
45-49	310	7.6	302	7.5	97.7
50-54	302	NA	NA	NA	NA
15-49	4,095	NA	4,017	NA	98.1

Note: The de facto population includes all residents and nonresidents who slept in the household the night before the interview.
NA = Not applicable

Table C.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions, Tanzania 1999

Subject	Reference group	Percentage missing information	Number of cases
Birth Date	Births in past 15 years		
Month only		2.94	8,372
Month and year		0.00	8,372
Age at death	Deaths to births in past 15 years	0.00	1,281
Age at/date of first union[1]	Ever-married women	0.34	3,086
Respondent's education	All women	0.00	4,029
Height or weight missing	Children under 5 in household	2.2	2,990
Diarrhoea in last 2 weeks	Living children 0-59 months	4.85	2,898

[1] Both year and age missing

C.4 Births by calendar years

Distribution of births by calendar years for living (L), dead (D), and all (T) children, according to reporting completeness, sex ratio at birth, and ratio of births by calendar year, Tanzania 1999

	Number of births			Percentage with complete birth date			Sex ratio at birth			Calendar ratio			Male			Female		
Year	(L)	(D)	(T)	(L)	(D)	(T)	(L)	(D)	(T)	(L)	(D)	(T)	(L)	(D)	(T)	(L)	(D)	(T)
99	539	42	581	99.8	100.0	99.8	95.0	134.0	97.4	NA	NA	NA	263	24	287	276	18	295
98	578	79	657	100.0	98.8	99.9	119.5	69.6	112.0	99.9	131.2	102.8	314	33	347	263	47	310
97	617	79	696	99.9	94.1	99.2	101.5	116.4	103.0	110.5	101.2	109.4	311	42	353	306	36	343
96	540	76	616	99.6	95.9	99.2	88.1	192.8	96.9	94.0	87.1	93.1	253	50	303	287	26	313
95	530	97	627	98.6	97.5	98.5	112.0	136.5	115.4	102.4	114.2	104.0	280	56	336	250	41	291
94	497	93	589	97.7	92.7	96.9	87.2	124.9	92.2	94.7	94.2	94.6	231	52	283	265	41	307
93	518	100	618	97.7	95.3	97.3	128.5	152.4	132.1	101.8	105.4	102.3	291	61	352	227	40	266
92	522	98	619	96.9	96.4	96.9	104.2	123.1	107.0	104.6	100.8	104.0	266	54	320	255	44	299
91	479	94	573	97.6	92.3	96.7	101.8	107.5	102.7	101.8	91.1	99.9	242	49	290	237	45	283
90	419	108	527	95.7	92.2	95.0	92.9	120.3	98.0	NA	NA	NA	202	59	261	217	49	266
85-89	2,804	374	3,178	99.6	97.0	99.3	102.7	122.0	104.8	NA	NA	NA	1,421	205	1,626	1,383	168	1,551
80-84	2,434	493	2,927	97.2	93.8	96.6	102.5	124.9	106.0	NA	NA	NA	1,232	274	1,506	1,202	219	1,421
75-79	1,806	404	2,209	95.9	88.3	94.5	98.3	102.8	99.1	NA	NA	NA	895	205	1,100	910	199	1,110
70-74	1,277	317	1,594	94.8	89.3	93.7	81.6	99.7	85.0	NA	NA	NA	574	158	732	703	159	862
< 70	1,387	491	1,878	91.4	90.1	91.0	100.6	111.1	103.2	NA	NA	NA	696	258	954	692	233	924
All	9,709	2,078	11,786	96.5	91.7	95.7	98.5	112.5	100.9	NA	NA	NA	4,818	1,100	5,918	4,891	978	5,868

NA = Not applicable

[1] Both year and month of birth given

[2] $(B_m/B_f)*100$, where B_m and B_f are the numbers of male and female births, respectively

[3] $[2B_x/(B_{x-1}+B_{x+1})]*100$, where B_x is the number of births in calendar year x

Table C.5 Reporting of age at death in days

Distribution of reported deaths under 1 month of age by age at death in days and the percentage of neonatal deaths reported to occur at ages 0-6 days, for five-year periods preceding the survey, Tanzania 1999

Age at death (in days)	Number of years preceding survey				Total 0-19
	0-4	5-9	10-14	15-19	
<1	39	51	14	14	118
1	26	21	6	24	77
2	10	14	3	4	31
3	11	8	1	3	24
4	1	3	0	1	6
5	1	2	2	2	8
6	1	5	6	1	13
7	13	19	9	10	51
8	0	1	5	1	7
9	2	0	2	2	6
10	0	1	1	0	1
12	0	2	1	0	3
13	2	0	0	0	2
14	12	9	9	3	33
16	0	1	0	0	1
17	0	0	1	0	1
19	0	1	0	0	1
20	2	0	0	0	2
21	8	6	2	2	18
22	0	1	0	0	1
23	0	0	1	0	1
26	1	0	0	0	1
28	0	4	1	3	8
29	0	1	1	0	2
30	6	11	5	1	24
31+	0	1	0	0	1
Total 0-30	137	161	70	72	440
Percent early neonatal[1]	65.3	65.1	47.9	68.3	62.9

[1] (0-6 days/0-3 days) * 100

Table C.6 Reporting of age at death in months

Distribution of reported deaths under 2 years of age by age at death in months and the percentage of infant deaths reported to occur at ages under one month, for five-year periods preceding the survey, Tanzania 1999

Age at deaths (in months)	Number of years preceding the survey				Total
	0-4	5-9	10-14	15-19	0-19
<1[a]	137	161	70	72	440
1	14	13	13	11	51
2	25	26	15	12	78
3	11	24	29	12	76
4	17	18	8	12	55
5	14	21	14	8	57
6	26	32	32	15	105
7	8	22	13	8	52
8	15	12	10	10	46
9	17	12	20	10	58
10	7	2	4	3	16
11	8	6	5	5	24
12	16	36	27	25	105
13	8	4	0	2	14
14	5	4	5	1	15
15	2	4	3	6	15
16	4	3	3	0	10
17	1	2	0	2	6
18	4	7	7	5	24
19	5	1	5	0	11
20	0	1	0	2	3
21	1	0	1	2	4
22	1	1	1	1	4
23	1	1	0	0	2
1 year	0	4	2	1	7
Percent neonatal[b]	45.8	46.4	30.1	40.5	41.7
Total 0-11	299	348	232	178	1,057

[a] Includes deaths under 1 month reported in days.
[b] Under 1 month/under 1 year

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TRCHS-1 **4 JAN 2000**

TANZANIA REPRODUCTIVE AND CHILD HEALTH SURVEY
HOUSEHOLD QUESTIONNAIRE

IDENTIFICATION

REGION _____

DISTRICT _____

WARD . . . . .

E.A. NUMBER . . . . .

TRCHS CLUSTER NUMBER . . . . .

HOUSEHOLD NUMBER . . . . .

DAR ES SALAAM=1, SMALL CITY* =2, TOWN=3, RURAL/VILLAGE=4 . . . . .

NAME OF HOUSEHOLD HEAD _____

* Small cities are: Mwanza, Arusha, Morogoro, Dodoma, Moshi, Tanga, Iringa, Mbeya, and Tabora. All other urban areas are towns.

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY
				MONTH
				YEAR 1 9
INTERVIEWER'S NAME				INTER. ID NO.
RESULT*				RESULT
NEXT VISIT: DATE				TOTAL NO. OF VISITS
TIME				

*RESULT CODES:

1	COMPLETED
2	NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT
3	ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME
4	POSTPONED
5	REFUSED
6	DWELLING VACANT OR ADDRESS NOT A DWELLING
7	DWELLING DESTROYED
8	DWELLING NOT FOUND
9	OTHER _____ (SPECIFY)

TOTAL PERSONS IN HOUSEHOLD

TOTAL ELIGIBLE WOMEN

TOTAL ELIGIBLE MEN

LINE NO. OF RESP. TO HOUSEHOLD SCHEDULE

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____	NAME _____		
DATE _____	DATE _____		

HOUSEHOLD SCHEDULE

Now we would like some information about the people who usually live in your household or who are staying with you now.

LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	ELIGIBILITY		
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household.	What is the relationship of (NAME) to the head of the household?*	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME)?	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	CIRCLE LINE NUMBER OF ALL MEN AGE 15-59	CIRCLE LINE NUMBER OF ALL CHILD-REN UNDER AGE 5
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(8A)	(9)
			M F	YES NO	YES NO	IN YEARS			
01			1 2	1 2	1 2		01	01	01
02			1 2	1 2	1 2		02	02	02
03			1 2	1 2	1 2		03	03	03
04			1 2	1 2	1 2		04	04	04
05			1 2	1 2	1 2		05	05	05
06			1 2	1 2	1 2		06	06	06
07			1 2	1 2	1 2		07	07	07
08			1 2	1 2	1 2		08	08	08
09			1 2	1 2	1 2		09	09	09
10			1 2	1 2	1 2		10	10	10

* CODES FOR Q.3
RELATIONSHIP TO HEAD OF HOUSEHOLD:
01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = SON-IN-LAW OR DAUGHTER-IN-LAW
05 = GRANDCHILD
06 = PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
10 = OTHER RELATIVE
11 = ADOPTED/FOSTER/ STEPCHILD
12 = NOT RELATED
98 = DON'T KNOW

LINE NO.	PARENTAL SURVIVORSHIP AND RESIDENCE FOR PERSONS LESS THAN 15 YEARS OLD				EDUCATION						
	Is (NAME)'s natural mother alive?	IF ALIVE	Is (NAME)'s natural father alive?	IF ALIVE	IF AGE 3 OR OLDER		IF AGE 3-24 YEARS				
		Does (NAME)'s natural mother live in this household? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER**		Does (NAME)'s natural father live in this household? IF YES: What is his name? RECORD FATHER'S LINE NUMBER**	Has (NAME) ever attended school?	What is the highest standard or form (NAME) has completed? ***	Is (NAME) currently attending school (including pre-school)?	During the current school year, did (NAME) attend school at any time?	During the current school year, what standard or form is (NAME) attending?	During the previous school year, did (NAME) attend school at any time?	During that school year, what standard or form did (NAME) attend?
	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	YES NO DK		YES NO DK		YES NO	STD/FRM	YES NO	YES NO	STD/FRM	YES NO	STD/FRM
01	1 2 8		1 2 8		1 2 NEXT LINE		1 2 GO TO 18	1 2 GO TO 19		1 2 NEXT LINE	
02	1 2 8		1 2 8		1 2 NEXT LINE		1 2 GO TO 18	1 2 GO TO 19		1 2 NEXT LINE	
03	1 2 8		1 2 8		1 2 NEXT LINE		1 2 GO TO 18	1 2 GO TO 19		1 2 NEXT LINE	
04	1 2 8		1 2 8		1 2 NEXT LINE		1 2 GO TO 18	1 2 GO TO 19		1 2 NEXT LINE	
05	1 2 8		1 2 8		1 2 NEXT LINE		1 2 GO TO 18	1 2 GO TO 19		1 2 NEXT LINE	
06	1 2 8		1 2 8		1 2 NEXT LINE		1 2 GO TO 18	1 2 GO TO 19		1 2 NEXT LINE	
07	1 2 8		1 2 8		1 2 NEXT LINE		1 2 GO TO 18	1 2 GO TO 19		1 2 NEXT LINE	
08	1 2 8		1 2 8		1 2 NEXT LINE		1 2 GO TO 18	1 2 GO TO 19		1 2 NEXT LINE	
09	1 2 8		1 2 8		1 2 NEXT LINE		1 2 GO TO 18	1 2 GO TO 19		1 2 NEXT LINE	
10	1 2 8		1 2 8		1 2 NEXT LINE		1 2 GO TO 18	1 2 GO TO 19		1 2 NEXT LINE	

** Q.10 THROUGH Q.13
THESE QUESTIONS REFER TO THE BIOLOGICAL PARENTS OF THE CHILD.
IN Q.11 AND Q.13, RECORD '00' IF PARENT NOT LISTED IN HOUSEHOLD SCHEDULE.

***CODES FOR Qs. 15, 18 AND 20:
00= NURSERY SCHOOL, KINDERGARTEN
01= STANDARD 1
02= STANDARD 2
03= STANDARD 3
04= STANDARD 4
05= STANDARD 5
06= STANDARD 6
07= STANDARD 7
08= STANDARD 8
09= FORM 1
10= FORM 2
11= FORM 3
12= FORM 4
13= FORM 5
14= FORM 6
15= UNIVERSITY
96= OTHER
98= DOES NOT KNOW

LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	ELIGIBILITY		
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household.	What is the relationship of (NAME) to the head of the household?*	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME)?	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	CIRCLE LINE NUMBER OF ALL MEN AGE 15-59	CIRCLE LINE NUMBER OF ALL CHILD-REN UNDER AGE 5
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(8A)	(9)
			M F	YES NO	YES NO	IN YEARS			
11			1 2	1 2	1 2		11	11	11
12			1 2	1 2	1 2		12	12	12
13			1 2	1 2	1 2		13	13	13
14			1 2	1 2	1 2		14	14	14
15			1 2	1 2	1 2		15	15	15
16			1 2	1 2	1 2		16	16	16
17			1 2	1 2	1 2		17	17	17
18			1 2	1 2	1 2		18	18	18
19			1 2	1 2	1 2		19	19	19
20			1 2	1 2	1 2		20	20	20

* CODES FOR Q.3 RELATIONSHIP TO HEAD OF HOUSEHOLD:
01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = SON-IN-LAW OR DAUGHTER-IN-LAW
05 = GRANDCHILD
06 = PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
10 = OTHER RELATIVE
11 = ADOPTED/FOSTER/ STEPCHILD
12 = NOT RELATED
98 = DON'T KNOW

*** CODES FOR Qs. 15, 18 AND 20:
00= NURSERY SCHOOL, KINDERGARTEN
01= STANDARD 1
02= STANDARD 2
03= STANDARD 3
04= STANDARD 4
05= STANDARD 5
06= STANDARD 6
07= STANDARD 7
08= STANDARD 8
09= FORM 1
10= FORM 2
11= FORM 3
12= FORM 4
13= FORM 5
14= FORM 6
15= UNIVERSITY
96= OTHER
98= DOES NOT KNOW

LINE NO.	PARENTAL SURVIVORSHIP AND RESIDENCE FOR PERSONS LESS THAN 15 YEARS OLD				EDUCATION						
					IF AGE 3 OR OLDER		IF AGE 3-24 YEARS				
	Is (NAME)'s natural mother alive?	IF ALIVE: Does (NAME)'s natural mother live in this household? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER**	Is (NAME)'s natural father alive?	IF ALIVE: Does (NAME)'s natural father live in this household? IF YES: What is his name? RECORD FATHER'S LINE NUMBER**	Has (NAME) ever attended school?	What is the highest standard or form (NAME) has completed? ***	Is (NAME) currently attending school (including pre-school)?	During the current school year, did (NAME) attend school at any time?	During the current school year, what standard or form is (NAME) attending?	During the previous school year, did (NAME) attend school at any time?	During that school year, what standard or form did (NAME) attend?
	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	YES NO DK		YES NO DK		YES NO	STD/FRM	YES NO	YES NO	STD/FRM	YES NO	STD/FRM
11	1 2 8		1 2 8		1 2 NEXT LINE		1 2 GO TO 18	1 2 GO TO 19		1 2 NEXT LINE	
12	1 2 8		1 2 8		1 2 NEXT LINE		1 2 GO TO 18	1 2 GO TO 19		1 2 NEXT LINE	
13	1 2 8		1 2 8		1 2 NEXT LINE		1 2 GO TO 18	1 2 GO TO 19		1 2 NEXT LINE	
14	1 2 8		1 2 8		1 2 NEXT LINE		1 2 GO TO 18	1 2 GO TO 19		1 2 NEXT LINE	
15	1 2 8		1 2 8		1 2 NEXT LINE		1 2 GO TO 18	1 2 GO TO 19		1 2 NEXT LINE	
16	1 2 8		1 2 8		1 2 NEXT LINE		1 2 GO TO 18	1 2 GO TO 19		1 2 NEXT LINE	
17	1 2 8		1 2 8		1 2 NEXT LINE		1 2 GO TO 18	1 2 GO TO 19		1 2 NEXT LINE	
18	1 2 8		1 2 8		1 2 NEXT LINE		1 2 GO TO 18	1 2 GO TO 19		1 2 NEXT LINE	
19	1 2 8		1 2 8		1 2 NEXT LINE		1 2 GO TO 18	1 2 GO TO 19		1 2 NEXT LINE	
20	1 2 8		1 2 8		1 2 NEXT LINE		1 2 GO TO 18	1 2 GO TO 19		1 2 NEXT LINE	

TICK HERE IF CONTINUATION SHEET USED ☐

Just to make sure that I have a complete listing:

1) Are there any other persons such as small children or infants that we have not listed? YES ☐ → ENTER EACH IN TABLE NO ☐

2) In addition, are there any other people who may not be members of your family, such as domestic servants, lodgers or friends who usually live here? YES ☐ → ENTER EACH IN TABLE NO ☐

3) Are there any guests or temporary visitors staying here, or anyone else who slept here last night, who have not been listed? YES ☐ → ENTER EACH IN TABLE NO ☐

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
21	What is the main source of drinking water for members of your household?	PIPED WATER PIPED INTO DWELLING . . . . . 11 PIPED INTO YARD/PLOT . . . . . 12 PUBLIC TAP . . . . . 13 WATER FROM OPEN OR UNPROTECTED WELL . . . . . 21 WATER FROM COVERED WELL OR BOREHOLE PROTECTED DUG WELL . . . . . 31 BOREHOLE OR TUBEWELL . . . . 32 SURFACE WATER PROTECTED SPRING . . . . . 41 UNPROTECTED SPRING . . . . . 42 POND, RIVER,STREAM . . . . . 43 RAINWATER . . . . . 51 TANKER TRUCK . . . . . 61 BOTTLED WATER . . . . . 71 OTHER _____ 96	→ 23 → 23 → 23
22	How long does it take you to go there, get water, and come back?	MINUTES . . . . . ☐☐☐ ON PREMISES 996	
23	What kind of toilet facility do most members of your household use?	FLUSH TOILET . . . . . 11 PIT TOILET/LATRINE TRADITIONAL PIT TOILET . . . . . 21 VENTILATED IMPROVED PIT (VIP) LATRINE . . . . . 22 NO FACILITY/BUSH/FIELD . . . . . 31 OTHER _____ 96	 → 25
24	Do you share this facility with other households?	YES . . . . . 1 NO 2	
25	Does your household have: Electricity? A radio? A television? A refrigerator?	YES NO ELECTRICITY . . . . . 1 2 RADIO . . . . . 1 2 TELEVISION . . . . . 1 2 REFRIGERATOR 1 2	
27	MAIN MATERIAL OF THE FLOOR. RECORD OBSERVATION.	NATURAL FLOOR EARTH/SAND . . . . . 11 RUDIMENTARY FLOOR WOOD PLANKS . . . . . 21 FINISHED FLOOR PARQUET OR POLISHED WOOD . . . . . 31 CERAMIC TILES, CARPET . . . . . 33 CEMENT . . . . . 34 OTHER _____ 96 (SPECIFY)	
28	Does any member of your household own: A bicycle? A motorcycle or motor scooter? A car or truck?	YES NO BICYCLE . . . . . 1 2 MOTORCYCLE/SCOOTER . . . 1 2 CAR/TRUCK 1 2	
29	Does your household have any bednets that can be used while sleeping?	YES . . . . . 1 NO 2	 → 34
30	CHECK COLUMNS (6) AND (7): NUMBER OF CHILDREN UNDER AGE 5 WHO SLEPT IN THE HOUSEHOLD LAST NIGHT ONE OR MORE ☐ ▼ NONE ☐		→ 34

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
31	Did any of the children under age 5 who slept in the household last night sleep under a bednet? IF YES: Did all or only some sleep under a bednet?	ALL CHILDREN . . . . . 1 SOME CHILDREN . . . . . 2 NONE 3	→ 34
32	Were any of these bednets ever treated with a chemical (dawa) to avoid mosquito bites?	YES . . . . . 1 NO . . . . . 2 DOES NOT KNOW 8	→ 34 → 34
33	How long ago was the bednet last treated?	MONTHS AGO . . . . . ☐☐ DOES NOT KNOW 98	
34	ASK RESPONDENT FOR A TEASPOONFUL OF SALT. TEST SALT FOR IODINE. RECORD PPM (PARTS PER MILLION).	0 PPM (NO IODINE) . . . . . 1 25 PPM . . . . . 2 50 PPM . . . . . 3 75 PPM . . . . . 4 100 PPM . . . . . 5 NOT TESTED 8	

35. HEIGHT AND WEIGHT MEASUREMENT OF CHILDREN

CHILDREN UNDER AGE 5				WEIGHT AND HEIGHT OF CHILDREN UNDER AGE 5				
LINE NO. FROM COL.(1)	NAME FROM COL.(2)	AGE FROM COL.(7)	What is (NAME)'s date of birth?	WEIGHT (KILOGRAMS)	HEIGHT (CENTIMETERS)	MEA-SURED LYING DOWN OR STAND-ING?	BCG SCAR (ON RIGHT SHOU LDER)	RESULT 1 MEASURED 2 NOT HOME 3 REFUSED 6 OTHER
				0 .	.	LY-ING 1 STAND-ING 2	YES 1 NO 2	
				0 .	.	1 2	1 2	
				0 .	.	1 2	1 2	
				0 .	.	1 2	1 2	
				0 .	.	1 2	1 2	
				0 .	.	1 2	1 2	

TICK HERE IF CONTINUATION SHEET USED ☐

36. CHILD LABOUR MODULE FOR CHILDREN AGES 5-14

LINE NO. FROM COL.(1) (1)	NAME FROM COL.(2) (2)	AGE FROM COL.(7) (3)	Has (NAME) ever done any kind of work for pay? (4)	Is (NAME) currently doing any kind of work for pay? (5)	For how many hours a week does (NAME) work for pay? (6)	Does (NAME) regularly do unpaid family work on the farm or in a family business? (7)	For how many hours a week does (NAME) do unpaid work? (8)	Does (NAME) regularly help with household chores at home, like cleaning, caring for animals, cooking? (9)	How many hours per day does (NAME) help with household chores? (10)
			YES 1 NO 2	YES 1 NO 2 GO TO 7		YES 1 NO 2 GO TO 9		YES 1 NO 2 NEXT LINE	
			1 2	1 2 GO TO 7		1 2 GO TO 9		1 2 NEXT LINE	
			1 2	1 2 GO TO 7		1 2 GO TO 9		1 2 NEXT LINE	
			1 2	1 2 GO TO 7		1 2 GO TO 9		1 2 NEXT LINE	
			1 2	1 2 GO TO 7		1 2 GO TO 9		1 2 NEXT LINE	
			1 2	1 2 GO TO 7		1 2 GO TO 9		1 2 END	

TICK HERE IF CONTINUATION SHEET USED ☐

TANZANIA REPRODUCTIVE AND CHILD HEALTH SURVEY
WOMAN'S QUESTIONNAIRE

IDENTIFICATION

REGION _____

DISTRICT _____

WARD . . . . . .

E.A. NUMBER . . . . . .

TRCHS CLUSTER NUMBER . . . . . .

HOUSEHOLD NUMBER . . . . . .

DAR ES SALAAM=1, SMALL CITY* =2, TOWN=3, RURAL/VILLAGE=4 . . . . . .

NAME OF HOUSEHOLD HEAD _____

NAME AND LINE NUMBER OF WOMAN _____

* Small cities are: Mwanza, Arusha, Morogoro, Dodoma, Moshi, Tanga, Iringa, Mbeya, and Tabora. All other urban areas are towns.

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY
				MONTH
				YEAR 1 9
INTERVIEWER'S NAME				INTER. ID NO.
RESULT*				RESULT
NEXT VISIT: DATE				TOTAL NO. OF VISITS
TIME				

*RESULT CODES:

1 COMPLETED
2 NOT AT HOME
3 POSTPONED
4 REFUSED
5 PARTLY COMPLETED
6 INCAPACITATED
7 OTHER _____ (SPECIFY)

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____	NAME _____		
DATE _____	DATE _____		

SECTION 1. RESPONDENT'S BACKGROUND

INTRODUCTION

Hello. My name is _____ and I am working with the National Bureau of Statistics. We are conducting a national survey about the health of women and children. We would very much appreciate your participation in this survey. I would like to ask you about your health (and the health of your children). This information will help the government to plan health services. The survey usually takes between 20 and 45 minutes to complete. Whatever information you provide will be kept strictly confidential and will not be shown to other persons.

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey?
May I begin the interview now?

Signature of interviewer: _____ Date: _____

RESPONDENT AGREES TO BE INTERVIEWED . . . . . 1 ▼ RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . . . . 2 →END

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOUR . . . . . ☐☐ MINUTES . . . . . ☐☐ MORNING . . . . . 1 AFTERNOON . . . . . 2 EVENING, NIGHT 3	
102	First I would like to ask some questions about you and your household. For most of the time until you were 12 years old, did you live in Dar es Salaam, another urban area or in a rural area?	DAR ES SALAAM . . . . . 1 OTHER URBAN AREA . . . . . 2 RURAL AREA/VILLAGE 3	
103	How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)? IF LESS THAN ONE YEAR, RECORD '00' YEARS.	YEARS . . . . . ☐☐ ALWAYS . . . . . 95 VISITOR 96	→105
104	Just before you moved here, did you live in Dar es Salaam, another urban area or in a rural area?	DAR ES SALAAM . . . . . 1 OTHER URBAN AREA . . . . . 2 RURAL AREA/VILLAGE 3	
105	In what month and year were you born?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	
106	How old were you at your last birthday? COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.	AGE IN COMPLETED YEARS . . . . . ☐☐	
107	Have you ever attended school?	YES . . . . . 1 NO 2	→111
108	What is the highest formal school you completed?	LESS THAN ONE YEAR . . . . . 00 STANDARD 1 . . . . . 01 STANDARD 2 . . . . . 02 STANDARD 3 . . . . . 03 STANDARD 4 . . . . . 04 STANDARD 5 . . . . . 05 STANDARD 6 . . . . . 06 STANDARD 7 . . . . . 07 STANDARD 8 . . . . . 08 FORM 1 . . . . . 09 FORM 2 . . . . . 10 FORM 3 . . . . . 11 FORM 4 . . . . . 12 FORM 5 . . . . . 13 FORM 6 . . . . . 14 UNIVERSITY . . . . . 15 OTHER_____ 96	
110	CHECK 108: STANDARD 8 OR LESS ☐ ▼ FORM 1 OR HIGHER ☐ _____		→114
111	Now I would like you to read out loud as much of this sentence as you can. SHOW CARD TO RESPONDENT.	CANNOT READ AT ALL . . . . . 1 ABLE TO READ ONLY PARTS OF SENTENCE . . . . . 2 ABLE TO READ WHOLE SENTENCE . . . . . 3 NO CARD, REFUSED, OTHER 4	→115

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
114	Do you read a newspaper or magazine almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
115	Do you listen to the radio almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
116	Do you watch television almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
117	What is your religion?	MOSLEM . . . . . 1 CATHOLIC . . . . . 2 PROTESTANT . . . . . 3 NONE . . . . . 4 OTHER 6	

SECTION 2: REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about all the births you have had during your life. Have you ever given birth?	YES . . . . . 1 NO 2	→206
202	Do you have any sons or daughters to whom you have given birth who are now living with you?	YES . . . . . 1 NO 2	→204
203	How many sons live with you? And how many daughters live with you? IF NONE, RECORD '00'.	SONS AT HOME . . . . . ☐☐ DAUGHTERS AT HOME . . . . . ☐☐	
204	Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?	YES . . . . . 1 NO 2	→206
205	How many sons are alive but do not live with you? And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	SONS ELSEWHERE . . . . . ☐☐ DAUGHTERS ELSEWHERE . . . . . ☐☐	
206	Have you ever given birth to a boy or girl who was born alive but later died? IF NO, PROBE: Any baby who cried or showed signs of life but survived only a few hours or days?	YES . . . . . 1 NO 2	→208
207	How many boys have died? And how many girls have died? IF NONE, RECORD '00'.	BOYS DEAD . . . . . ☐☐ GIRLS DEAD . . . . . ☐☐	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL . . . . . ☐☐	
209	CHECK 208: Just to make sure that I have this right: you have had in TOTAL _____ births during your life. Is that correct? YES ☐ ▼ NO ☐→ PROBE AND CORRECT 201-208 AS NECESSARY.		
210	CHECK 208: ONE OR MORE BIRTHS ☐ ▼ NO BIRTHS ☐		→226

211 Now I would like to record the names of all your births, whether still alive or not, starting with the first one you had.
RECORD NAMES OF ALL THE BIRTHS IN 212. RECORD TWINS AND TRIPLETS ON SEPARATE LINES.

212 What name was given to your (first/next) baby? (NAME)	213 Were any of these births twins?	214 Is (NAME) a boy or a girl?	215 In what month and year was (NAME) born? PROBE: What is his/her birthday?	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at his/her last birthday? RECORD AGE IN COM-PLETED YEARS.	218 IF ALIVE: Is (NAME) living with you?	219 IF ALIVE: RECORD HOUSEHOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD)	220 IF DEAD: How old was (NAME) when he/she died? IF '1 YR', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	221 Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME)?
01	SING . 1 MULT 2	BOY 1 GIRL 2	MONTH ☐☐ YEAR ☐☐☐☐	YES . 1 NO . . 2 → 220	AGE IN YEARS ☐☐	YES . . 1 NO . . . 2	LINE NUMBER ☐☐ → (NEXT BIRTH)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS . . 3 ☐☐	
02	SING . 1 MULT 2	BOY 1 GIRL 2	MONTH ☐☐ YEAR ☐☐☐☐	YES . 1 NO . . 2 → 220	AGE IN YEARS ☐☐	YES . . 1 NO . . . 2	LINE NUMBER ☐☐ → (GO TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS . . 3 ☐☐	YES . . . 1 NO 2
03	SING . 1 MULT 2	BOY 1 GIRL 2	MONTH ☐☐ YEAR ☐☐☐☐	YES . 1 NO . . 2 → 220	AGE IN YEARS ☐☐	YES . . 1 NO . . . 2	LINE NUMBER ☐☐ → (GO TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS . . 3 ☐☐	YES . . . 1 NO 2
04	SING . 1 MULT 2	BOY 1 GIRL 2	MONTH ☐☐ YEAR ☐☐☐☐	YES . 1 NO . . 2 → 220	AGE IN YEARS ☐☐	YES . . 1 NO . . . 2	LINE NUMBER ☐☐ → (GO TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS . . 3 ☐☐	YES . . . 1 NO 2
05	SING . 1 MULT 2	BOY 1 GIRL 2	MONTH ☐☐ YEAR ☐☐☐☐	YES . 1 NO . . 2 → 220	AGE IN YEARS ☐☐	YES . . 1 NO . . . 2	LINE NUMBER ☐☐ → (GO TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS . . 3 ☐☐	YES . . . 1 NO 2
06	SING . 1 MULT 2	BOY 1 GIRL 2	MONTH ☐☐ YEAR ☐☐☐☐	YES . 1 NO . . 2 → 220	AGE IN YEARS ☐☐	YES . . 1 NO . . . 2	LINE NUMBER ☐☐ → (GO TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS . . 3 ☐☐	YES . . . 1 NO 2
07	SING . 1 MULT 2	BOY 1 GIRL 2	MONTH ☐☐ YEAR ☐☐☐☐	YES . 1 NO . . 2 → 220	AGE IN YEARS ☐☐	YES . . 1 NO . . . 2	LINE NUMBER ☐☐ → (GO TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS . . 3 ☐☐	YES . . . 1 NO 2
08	SING . 1 MULT 2	BOY 1 GIRL 2	MONTH ☐☐ YEAR ☐☐☐☐	YES . 1 NO . . 2 → 220	AGE IN YEARS ☐☐	YES . . 1 NO . . . 2	LINE NUMBER ☐☐ → (GO TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS . . 3 ☐☐	YES . . . 1 NO 2

212 What name was given to your next baby? (NAME)	213 Were any of these births twins?	214 Is (NAME) a boy or a girl?	215 In what month and year was (NAME) born? PROBE: What is his/her birthday?	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at his/her last birthday? RECORD AGE IN COM-PLETED YEARS.	218 IF ALIVE: Is (NAME) living with you?	219 IF ALIVE: RECORD HOUSEHOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD)	220 IF DEAD: How old was (NAME) when he/she died? IF '1 YR', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	221 Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME)?
09	SING . 1 MULT 2	BOY 1 GIRL 2	MONTH ☐☐ YEAR ☐☐☐☐	YES . 1 NO . . 2 → 220	AGE IN YEARS ☐☐	YES . . 1 NO . . . 2	LINE NUMBER ☐☐ → (GO TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS . . 3 ☐☐	YES . . . 1 NO 2
10	SING . 1 MULT 2	BOY 1 GIRL 2	MONTH ☐☐ YEAR ☐☐☐☐	YES . 1 NO . . 2 → 220	AGE IN YEARS ☐☐	YES . . 1 NO . . . 2	LINE NUMBER ☐☐ → (GO TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS . . 3 ☐☐	YES . . . 1 NO 2
11	SING . 1 MULT 2	BOY 1 GIRL 2	MONTH ☐☐ YEAR ☐☐☐☐	YES . 1 NO . . 2 → 220	AGE IN YEARS ☐☐	YES . . 1 NO . . . 2	LINE NUMBER ☐☐ → (GO TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS . . 3 ☐☐	YES . . . 1 NO 2
12	SING . 1 MULT 2	BOY 1 GIRL 2	MONTH ☐☐ YEAR ☐☐☐☐	YES . 1 NO . . 2 → 220	AGE IN YEARS ☐☐	YES . . 1 NO . . . 2	LINE NUMBER ☐☐ → (GO TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS . . 3 ☐☐	YES . . . 1 NO 2

222	Have you had any live births since the birth of (NAME OF LAST BIRTH)?	YES . . . . . 1 NO 2	

223 COMPARE 208 WITH NUMBER OF BIRTHS IN HISTORY ABOVE AND MARK:

NUMBERS ARE SAME ☐ ↓

NUMBERS ARE DIFFERENT ☐ → (PROBE AND RECONCILE)

CHECK: FOR EACH BIRTH: YEAR OF BIRTH IS RECORDED. ☐

FOR EACH LIVING CHILD: CURRENT AGE IS RECORDED. ☐

FOR EACH DEAD CHILD: AGE AT DEATH IS RECORDED. ☐

FOR AGE AT DEATH 12 MONTHS OR 1 YR.: PROBE TO DETERMINE EXACT NUMBER OF MONTHS. ☐

224 CHECK 215 AND ENTER THE NUMBER OF BIRTHS IN 1994 OR LATER.
IF NONE, RECORD '0'. ☐

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
226	Are you pregnant now?	YES . . . . . 1 NO . . . . . 2 UNSURE 8	→ 230
227	How many months pregnant are you? RECORD NUMBER OF COMPLETED MONTHS.	MONTHS	
228	At the time you became pregnant did you want to become pregnant <u>then</u>, did you want to wait until <u>later</u>, or did you <u>not want</u> to have any (more) children at all?	THEN . . . . . 1 LATER . . . . . 2 NOT AT ALL 3	
229	Did you sleep under a bednet last night? IF YES: Was the bednet ever treated with a chemical to avoid mosquitos?	YES, TREATED BEDNET . . . . . 1 YES, UNTREATED BEDNET . . . . . 2 NO 3	
230	Altogether how many pregnancies have you ever had? INCLUDE ALL BIRTHS, MISCARRIAGES, ABORTIONS, AND CURRENT PREGNANCY. MULTIPLE BIRTHS = 1 PREGNANCY.	TOTAL PREGNANCIES	
231	When did your last menstrual period start? _____ (DATE, IF GIVEN)	DAYS AGO . . . . . 1 WEEKS AGO . . . . . 2 MONTHS AGO . . . . . 3 YEARS AGO . . . . . 4 IN MENOPAUSE/ HAS HAD HYSTERECTOMY . . 994 BEFORE LAST BIRTH . . . . . 995 NEVER MENSTRUATED 996	

SECTION 3. CONTRACEPTION

Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy.

CIRCLE CODE 1 IN 301 FOR EACH METHOD MENTIONED SPONTANEOUSLY. THEN PROCEED DOWN COLUMN 301, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY. CIRCLE CODE 1 IF METHOD IS RECOGNISED, AND CODE 2 IF NOT RECOGNISED. THEN, FOR EACH METHOD WITH CODE 1 CIRCLED IN 301, ASK 302.

301	Which ways or methods have you heard about? FOR METHODS NOT MENTIONED SPONTANEOUSLY, ASK: Have you ever heard of (METHOD)?		302 Have you ever used (METHOD)?
01	FEMALE STERILISATION, TUBAL LIGATION, TL. Women can have an operation to avoid having any more children.	YES . . . . . 1 NO . . . . . 2 ▼	Have you ever had an operation to avoid having any more children? YES . . . . . 1 NO 2
02	MALE STERILISATION, VASECTOMY. Men can have an operation to avoid having any more children.	YES . . . . . 1 NO . . . . . 2 ▼	Have you ever had a partner who had an operation to avoid having any more children? YES . . . . . 1 NO 2
03	PILL Women can take a pill every day	YES . . . . . 1 NO . . . . . 2 ▼	YES . . . . . 1 NO 2
04	IUD Women can have a loop or coil placed inside them by a doctor or a nurse.	YES . . . . . 1 NO . . . . . 2 ▼	YES . . . . . 1 NO 2
05	INJECTIONS Women can have an injection by a doctor or nurse which stops them from becoming pregnant for several months.	YES . . . . . 1 NO . . . . . 2 ▼	YES . . . . . 1 NO 2
06	IMPLANTS Women can have several small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for several years.	YES . . . . . 1 NO . . . . . 2 ▼	YES . . . . . 1 NO 2
07	CONDOM Men can put a rubber sheath on their penis before sexual intercourse.	YES . . . . . 1 NO . . . . . 2 ▼	YES . . . . . 1 NO 2
08	FEMALE CONDOM Women can place a sheath in their vagina before sexual intercourse.	YES . . . . . 1 NO . . . . . 2 ▼	YES . . . . . 1 NO 2
09	DIAPHRAGM, FOAM OR JELLY Women can place a sponge, suppository, diaphragm, jelly, or foam in their vagina before intercourse.	YES . . . . . 1 NO . . . . . 2 ▼	YES . . . . . 1 NO 2
10	LACTATIONAL AMENORRHOEA METHOD (LAM) Up to 6 months after childbirth, a woman can use a method that requires that she breastfeeds frequently, day and night, and that her menstrual period has not returned .	YES . . . . . 1 NO . . . . . 2 ▼	YES . . . . . 1 NO 2
11	RHYTHM OR CALENDAR METHOD Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse on the days of the month she is most likely to get pregnant.	YES . . . . . 1 NO . . . . . 2 ▼	YES . . . . . 1 NO 2
12	WITHDRAWAL Men can be careful and pull out before climax.	YES . . . . . 1 NO . . . . . 2 ▼	YES . . . . . 1 NO 2
13	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES . . . . . 1 _____ (SPECIFY) _____ (SPECIFY) NO . . . . . 2 ▼	YES . . . . . 1 NO . . . . . 2 YES . . . . . 1 NO 2
303	CHECK 302: NOT A SINGLE "YES" (NEVER USED) ▼	AT LEAST ONE "YES" (EVER USED)	→308

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
304	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	→328
306	What have you used or done? CORRECT 302 AND 303 (AND 301 IF NECESSARY).		
308	CHECK 302 (01): WOMAN NOT STERILISED ☐ ▼ WOMAN STERILISED ☐		→311A
309	CHECK 226: NOT PREGNANT OR UNSURE ☐ ▼ PREGNANT ☐		→328
310	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	→328
311 311A	Which method are you using? CIRCLE 'A' FOR FEMALE STERILISATION. IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD ON LIST.	FEMALE STERILISATION . . . . . A MALE STERILISATION . . . . . B PILL . . . . . C IUD . . . . . D INJECTIONS . . . . . E IMPLANTS . . . . . F CONDOM . . . . . G FEMALE CONDOM . . . . . H DIAPHRAGM/FOAM/JELLY . . . . . I LACT. AMEN. METHOD . . . . . J PERIODIC ABSTINENCE . . . . . K WITHDRAWAL . . . . . L OTHER _____ X (SPECIFY)	→319
313	Where did the sterilisation take place? IF SOURCE IS HOSPITAL, HEALTH CENTRE, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	GOVERNMENT/PUBLIC SECTOR REGIONAL/CONSULTANT HOSP 11 DISTRICT HOSPITAL . . . . . 12 GOVT. HEALTH CENTRE . . . . . 13 DISPENSARY/PARASTATAL FACILITY . . . . . 14 VILLAGE HEALTH POST . . . . . 15 PRIVATE MEDICAL SECTOR RELIGIOUS ORGANISATION FACILITY/MISSION HOSP . . . . . 21 PRIVATE DOCTOR/CLINIC/HOSP 22 OTHER PRIVATE MEDICAL _____ 26 (SPECIFY) OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
316	In what month and year was the sterilisation performed?	MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	→330

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
319	Where did you obtain (CURRENT METHOD) when you started using it?	GOVERNMENT/PUBLIC SECTOR REGIONAL/CONSULTANT HOSP 11 DISTRICT HOSPITAL . . . . . 12 GOVT. HEALTH CENTRE . . . . . 13 DISPENSARY/PARASTATAL FACILITY . . . . . 14 VILLAGE HEALTH POST/WORKER 15	
319A	Where did you learn to use the lactational amenorrhoea method? IF SOURCE IS HOSPITAL, HEALTH CENTRE, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	PRIVATE MEDICAL SECTOR RELIGIOUS ORGANISATION FACILITY/MISSION HOSP . . . . . 21 PRIVATE DOCTOR/CLINIC/HOSP 22 PHARMACY/MEDICAL STORE . . . 23 CBD WORKER . . . . . 24 OTHER PRIVATE SECTOR SHOP/KIOSK . . . . . 31 CHURCH . . . . . 32 FRIEND/RELATIVE/NEIGHBOUR . 33 HEALTH EDUCATION/BAR GIRLS 34 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
319B	For how many months have you been using (METHOD) continuously? IF LESS THAN 1 MONTH RECORD '00'.	MONTHS . . . . . ☐☐ 8 YEARS OR LONGER 96	
327	Where did you obtain (CURRENT METHOD) the last time? IF SOURCE IS HOSPITAL, HEALTH CENTRE, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	GOVERNMENT/PUBLIC SECTOR REGIONAL/CONSULTANT HOSP 11 DISTRICT HOSPITAL . . . . . 12 GOVT. HEALTH CENTRE . . . . . 13 DISPENSARY/PARASTATAL FACILITY . . . . . 14 VILLAGE HEALTH POST/WORKER 15 PRIVATE MEDICAL SECTOR RELIGIOUS ORGANISATION FACILITY/MISSION HOSP . . . . . 21 PRIVATE DOCTOR/CLINIC/HOSP 22 PHARMACY/MEDICAL STORE . . . 23 CBD WORKER . . . . . 24 OTHER PRIVATE SECTOR SHOP/KIOSK . . . . . 31 CHURCH . . . . . 32 FRIEND/RELATIVE/NEIGHBOUR . 33 HEALTH EDUCATION/BAR GIRLS 34 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	→330
328	Do you know of a place where you can obtain a method of family planning?	YES . . . . . 1 NO 2	→330

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
329	Where is that? IF SOURCE IS HOSPITAL, HEALTH CENTRE, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	GOVERNMENT/PUBLIC SECTOR REGIONAL/CONSULTANT HOSP 11 DISTRICT HOSPITAL . . . . . 12 GOVT. HEALTH CENTRE . . . . . 13 DISPENSARY/PARASTATAL FACILITY . . . . . 14 VILLAGE HEALTH POST/WORKER 15 PRIVATE MEDICAL SECTOR RELIGIOUS ORGANISATION FACILITY/MISSION HOSP . . . . . 21 PRIVATE DOCTOR/CLINIC/HOSP 22 PHARMACY/MEDICAL STORE . . . 23 CBD WORKER . . . . . 24 OTHER PRIVATE SECTOR SHOP/KIOSK . . . . . 31 CHURCH . . . . . 32 FRIEND/RELATIVE/NEIGHBOUR . 33 HEALTH EDUCATION/BAR GIRLS 34 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
330	In the last 12 months, were you visited by a field worker who talked to you about family planning?	YES . . . . . 1 NO 2	
331	In the last 12 months, have you attended a health facility for care for yourself (or your children)?	YES . . . . . 1 NO 2	→333
332	Did any staff member at the health facility speak to you about family planning methods?	YES . . . . . 1 NO 2	
333	Have you seen or heard of the Green Star symbol?	YES . . . . . 1 NO . . . . . 2 DOES NOT KNOW 8	 →401 →401
334	What does the Green Star symbol mean to you?	FAMILY PLANNING . . . . . 1 SOMETHING ELSE . . . . . 2 DOES NOT KNOW 8	
335	How did you learn about the Green Star?	BILLBOARDS . . . . . A POSTERS . . . . . B LEAFLETS . . . . . C RADIO . . . . . D CLINIC SIGN . . . . . E SERVICE PROVIDER . . . . . F OTHER _____ X (SPECIFY)	

SECTION 4A. PREGNANCY, POSTNATAL CARE AND BREASTFEEDING

401	CHECK 224: ONE OR MORE BIRTHS IN 1994 OR LATER ☐ ▼ NO BIRTHS IN 1994 OR LATER ☐ → 485		
402	ENTER IN THE TABLE THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 1994 OR LATER. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 2 BIRTHS, USE LAST COLUMN OF ADDITIONAL QUESTIONNAIRES). Now I would like to ask you some questions about the health of all your children born in the last five years. (We will talk about each separately)		
403	LINE NUMBER FROM 212	LAST BIRTH LINE NUMBER . . . . . ☐☐	NEXT-TO-LAST BIRTH LINE NUMBER . . . . . ☐☐
404	FROM 212 AND 216	NAME _____ ALIVE ☐ ▼ DEAD ☐ ▼	NAME _____ ALIVE ☐ ▼ DEAD ☐ ▼
405	At the time you became pregnant with (NAME), did you want to become pregnant <u>then</u>, did you want to wait until <u>later</u>, or did you <u>not want</u> to have any (more) children at all?	THEN . . . . . 1 (SKIP TO 407) ← LATER . . . . . 2 NOT AT ALL . . . . . 3 (SKIP TO 407) ←	THEN . . . . . 1 (SKIP TO 422) ← LATER . . . . . 2 NOT AT ALL . . . . . 3 (SKIP TO 422) ←
406	How much longer would you like to have waited?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ DON'T KNOW 998	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ DON'T KNOW 998
407	Did you see anyone for antenatal care for this pregnancy? IF YES: Whom did you see? Anyone else? PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS SEEN.	HEALTH PROFESSIONAL DOCTOR/MEDICAL ASST . . . A RURAL MEDICAL AIDE . . . . . B NURSE/MIDWIFE . . . . . C MCH AIDE . . . . . D OTHER PERSON VILLAGE HEALTH WORKER . E TRAINED BIRTH ATTENDANT F TRADITIONAL BIRTH ATTENDANT . . . . . G OTHER _____ X (SPECIFY) NO ONE . . . . . Y (SKIP TO 415) ←	
408	How many months pregnant were you when you first received antenatal care for this pregnancy?	MONTHS . . . . . ☐☐ DON'T KNOW 98	
409	How many times did you receive antenatal care during this pregnancy?	NO. OF TIMES . . . . . ☐☐ DON'T KNOW 98	
410	CHECK 409: NUMBER OF TIMES RECEIVED ANTENATAL CARE	ONCE ☐ ▼ (SKIP TO 413) MORE THAN ONCE OR DK ☐ ▼	
411	How many months pregnant were you the last time you received antenatal care?	MONTHS . . . . . ☐☐ DON'T KNOW 98	
413	Were you told about the signs of pregnancy complications?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 414A) ← DON'T KNOW 8	

414	Were you told where to go if you had these complications?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
414A	Do you have a card or other document with your immunisations listed? IF YES: May I see it please?	YES, SEEN . . . . . 1 YES, NOT SEEN . . . . . 2 NO . . . . . 3 DON'T KNOW 8	
415	During this pregnancy, were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 416) DON'T KNOW 8	
415A	During this pregnancy, how many times did you get this injection? IF CARD SEEN, COPY FROM CARD.	TIMES . . . . . [ ] DON'T KNOW 8	
416	During this pregnancy, were you given or did you buy any iron tablets or iron syrup? SHOW TABLET/SYRUP.	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
420	During this pregnancy, were you given or did you buy any drugs to prevent you from getting malaria?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 422) DON'T KNOW 8	
421	Which drug was that? RECORD ALL MENTIONED.	FANSIDAR . . . . . A CHLOROQUINE . . . . . B OTHER _____ X (SPECIFY) DOES NOT KNOW . . . . . Z	
422	When (NAME) was born, was he/she: very large, larger than average, average, smaller than average, or very small?	VERY LARGE . . . . . 1 LARGER THAN AVERAGE . . . . 2 AVERAGE . . . . . 3 SMALLER THAN AVERAGE . . . 4 VERY SMALL . . . . . 5 DON'T KNOW 8	VERY LARGE . . . . . 1 LARGER THAN AVERAGE . . . . 2 AVERAGE . . . . . 3 SMALLER THAN AVERAGE . . . 4 VERY SMALL . . . . . 5 DON'T KNOW 8
423	Was (NAME) weighed at birth?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 425) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 425) DON'T KNOW 8
424	How much did (NAME) weigh? RECORD WEIGHT FROM HEALTH CARD, IF AVAILABLE.	GRAMS FROM CARD . . . . . 1 [ ][ ][ ][ ] GRAMS FROM RECALL . . . . . 2 [ ][ ][ ][ ] DON'T KNOW 99998	GRAMS FROM CARD . . . . . 1 [ ][ ][ ][ ] GRAMS FROM RECALL . . . . . 2 [ ][ ][ ][ ] DON'T KNOW 99998
425	Who assisted with the delivery of (NAME)? Anyone else? PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS ASSISTING.	HEALTH PROFESSIONAL DOCTOR/MEDICAL ASST. . . A RURAL MEDICAL AIDE . . . . . B NURSE/MIDWIFE . . . . . C MCH AIDE . . . . . D OTHER PERSON VILLAGE HEALTH WORKER . E TRAINED BIRTH ATTENDANT F TRADITIONAL BIRTH ATTENDANT . . . . . G RELATIVE/FRIEND . . . . . H OTHER _____ X (SPECIFY) NO ONE . . . . . Y	HEALTH PROFESSIONAL DOCTOR/MEDICAL ASST. . . A RURAL MEDICAL AIDE . . . . . B NURSE/MIDWIFE . . . . . C MCH AIDE . . . . . D OTHER PERSON VILLAGE HEALTH WORKER . E TRAINED BIRTH ATTENDANT F TRADITIONAL BIRTH ATTENDANT . . . . . G RELATIVE/FRIEND . . . . . H OTHER _____ X (SPECIFY) NO ONE . . . . . Y

426	Where did you give birth to (NAME)?	AT HOME . . . . . 11 (SKIP TO 428) GOV'T OR PARASTATAL GOVT./PARA. HOSPITAL . . . 21 GOVT/PAR.HEALTH CENTRE 22 GOVT./PARA. DISPENSARY . 23 OTHER GOV'T _____ 26 (SPECIFY) PRIVATE/RELIGIOUS SECTOR PVT. HOSPITAL/CLINIC . . . . . 31 OTHER PVT. MEDICAL _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY) (SKIP TO 428)	AT HOME . . . . . 11 (SKIP TO 428) GOV'T. OR PARASTATAL GOVT./PARA. HOSPITAL . . . 21 GOVT/PAR.HEALTH CENTRE 22 GOVT./PARA. DISPENSARY . 23 OTHER GOV'T _____ 26 (SPECIFY) PRIVATE/RELIGIOUS SECTOR PVT. HOSPITAL/CLINIC . . . . . 31 OTHER PVT. MEDICAL _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY) (SKIP TO 428)
427	Was (NAME) delivered by caesarian section?	YES . . . . . 1 (SKIP TO 432) NO 2	YES . . . . . 1 (SKIP TO 434) NO 2
428	After (NAME) was born, did a health professional check on your health?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 432)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 434)
429	How many days or weeks after the delivery did the first check take place? RECORD '00' DAYS IF SAME DAY.	DAYS AFTER DEL . . . 1 ☐☐ WEEKS AFTER DEL . 2 ☐☐ DON'T KNOW 998	
430	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PROFESSIONAL DOCTOR/MEDICAL ASST. . . 01 RURAL MEDICAL AIDE . . . . . 02 NURSE/MIDWIFE . . . . . 03 MCH AIDE . . . . . 04 OTHER PERSON VILLAGE HEALTH WORKER . 05 TRAINED BIRTH ATTENDANT 06 TRADITIONAL BIRTH ATTENDANT . . . . . 07 RELATIVE/FRIEND . . . . . 08 OTHER _____ 96 (SPECIFY) NO ONE 09	
432	In the first two months after delivery, did you receive a vitamin A dose like this? SHOW AMPULE/CAPSULE/SYRUP.	YES . . . . . 1 NO 2	
433	Has your period returned since the birth of (NAME)?	YES . . . . . 1 (SKIP TO 435) NO . . . . . 2 (SKIP TO 436)	
434	Did your period return between the birth of (NAME) and your next pregnancy?		YES . . . . . 1 NO . . . . . 2 (SKIP TO 438)
435	For how many months after the birth of (NAME) did you not have a period?	MONTHS . . . . . ☐☐ DON'T KNOW 98	MONTHS . . . . . ☐☐ DON'T KNOW 98
436	CHECK 226: RESPONDENT PREGNANT?	NOT PREG-NANT ☐ ▼ PREGNANT OR UNSURE ☐ (SKIP TO 438)	
437	Have you resumed sexual relations since the birth of (NAME)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 439)	
438	For how many months after the birth of (NAME) did you not have sexual relations?	MONTHS . . . . . ☐☐ DON'T KNOW 98	MONTHS . . . . . ☐☐ DON'T KNOW 98

439	Did you ever breastfeed (NAME)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 444)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 444)
441	CHECK 404: CHILD ALIVE?	ALIVE ☐ DEAD ☐ (SKIP TO 443)	ALIVE ☐ DEAD ☐ (SKIP TO 443)
442	Are you still breastfeeding (NAME)?	YES . . . . . 1 (SKIP TO 445) NO 2	YES . . . . . 1 (SKIP TO 445) NO 2
443	For how many months did you breastfeed (NAME)?	MONTHS . . . . . ☐☐ DON'T KNOW 98	MONTHS . . . . . ☐☐ DON'T KNOW 98
444	CHECK 404: CHILD ALIVE?	ALIVE ☐ (SKIP TO 447) DEAD ☐ (GO BACK TO 405 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 451)	ALIVE ☐ (SKIP TO 447) DEAD ☐ (GO BACK TO 405 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 451)
445	How many times did you breastfeed last night between sunset and sunrise? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER.	NUMBER OF NIGHTTIME FEEDINGS . ☐☐	NUMBER OF NIGHTTIME FEEDINGS . ☐☐
446	How many times did you breastfeed yesterday during the daylight hours? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER.	NUMBER OF DAYLIGHT FEEDINGS . . ☐☐	NUMBER OF DAYLIGHT FEEDINGS . . ☐☐
447	Did (NAME) drink anything from a bottle with a nipple yesterday or last night?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
448	Now I would like to ask you about the types of foods and liquids (NAME) was given yesterday. At any time yesterday or last night, was (NAME) given any of the following:	YES NO DK	YES NO DK
	Plain water?	PLAIN WATER 1 2 8	PLAIN WATER 1 2 8
	Tinned, powdered, or fresh milk or infant formula?	MILK, FORMULA 1 2 8	MILK, FORMULA 1 2 8
	Tea, fruit juice, soda, sugar water?	TEA, JUICE, SODA 1 2 8	TEA, JUICE, SODA 1 2 8
	Oral rehydration solution?	ORS 1 2 8	ORS 1 2 8
	Any other liquids?	OTHER LIQUIDS 1 2 8	OTHER LIQUIDS 1 2 8
	Vitamin, mineral supplements or medicine?	VITAMINS, MEDICINE . . 1 2 8	VITAMINS, MEDICINE . . 1 2 8
	Any solid or semi-solid (mushy) food?	SOLID OR MUSHY FOOD 1 2 8	SOLID OR MUSHY FOOD 1 2 8
450		GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 451.	GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 451.

SECTION 4B. IMMUNISATION AND HEALTH

451	ENTER IN THE TABLE THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 1994 OR LATER. (IF THERE ARE MORE THAN 2 BIRTHS, USE LAST COLUMN OF ADDITIONAL QUESTIONNAIRES).		
452	LINE NUMBER FROM 212	LAST BIRTH LINE NUMBER	NEXT-TO-LAST BIRTH LINE NUMBER . . . . .
453	FROM 212 AND 216	NAME _____ ALIVE ☐ DEAD ☐ (GO TO 453 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 481)	NAME _____ ALIVE ☐ DEAD ☐ (GO TO 453 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 481)
454	Has (NAME) ever received a Vitamin A dose like this? SHOW AMPULE/CAPSULE/SYRUP.	YES . . . . . 1 NO . . . . . 2 (SKIP TO 455) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 455) DON'T KNOW 8
454A	How many months ago did (NAME) take the last capsule?	MONTHS AGO	MONTHS AGO . . . . .
454B	Where did (NAME) get this last dose of Vitamin A?	HEALTH CENTRE/CLINIC . . . . . 1 NATIONAL IMMUNISATION DAY 2 OTHER 8	HEALTH CENTRE/CLINIC . . . . . 1 NATIONAL IMMUNISATION DAY 2 OTHER 8
455	Do you have a card where (NAME'S) vaccinations are written down?[2] IF YES: May I see it please?	YES, SEEN . . . . . 1 (SKIP TO 457) YES, NOT SEEN . . . . . 2 (SKIP TO 459) NO CARD 3	YES, SEEN . . . . . 1 (SKIP TO 457) YES, NOT SEEN . . . . . 2 (SKIP TO 459) NO CARD 3
456	Did you ever have a vaccination card for (NAME)?	YES . . . . . 1 (SKIP TO 459) NO 2	YES . . . . . 1 (SKIP TO 459) NO 2
457	(1) COPY VACCINATION DATE FOR EACH VACCINE FROM THE CARD. (2) WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A VACCINATION WAS GIVEN, BUT NO DATE IS RECORDED.	DAY MONTH YEAR	DAY MONTH YEAR
	BCG	BCG . .	BCG . .
	POLIO 0 (POLIO GIVEN AT BIRTH)	POLIO0	POLIO0
	POLIO 1	POLIO1	POLIO1
	POLIO 2	POLIO2	POLIO2
	POLIO 3	POLIO3	POLIO3
	DPT 1	DPT1 .	DPT1 .
	DPT 2	DPT2 .	DPT2 .
	DPT 3	DPT3 .	DPT3 .
	MEASLES (SURUA)	SURUA	SURUA
	VITAMIN A (MOST RECENT)	VIT. A .	VIT. A .

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
458	Has (NAME) received any vaccinations that are not recorded on this card, including vaccinations received in a national immunisation day campaign? RECORD 'YES' ONLY IF RESPONDENT MENTIONS BCG, POLIO 0-3, DPT 1-3, AND/OR MEASLES VACCINE(S).	YES . . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 457) (SKIP TO 461) NO . . . . . 2 (SKIP TO 461) DON'T KNOW 8	YES . . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 457) (SKIP TO 461) NO . . . . . 2 (SKIP TO 461) DON'T KNOW 8
459	Did (NAME) ever receive any vaccinations to prevent him/her from getting diseases, including vaccinations received in a national immunisation day campaign?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 462A) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 462A) DON'T KNOW 8
460	Please tell me if (NAME) received any of the following vaccinations:		
460A	A BCG vaccination against tuberculosis, that is, an injection in the right shoulder that usually causes a scar?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
460B	Polio vaccine, that is, drops in the mouth?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 460E) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 460E) DON'T KNOW 8
460C	When was the first polio vaccine received, just after birth or later?	JUST AFTER BIRTH . . . . . 1 LATER 2	JUST AFTER BIRTH . . . . . 1 LATER 2
460D	How many times was the polio vaccine received?	NUMBER OF TIMES	NUMBER OF TIMES . . . . .
460E	DPT vaccination, that is, an injection given in the thigh or buttocks, sometimes at the same time as polio drops?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 460G) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 460G) DON'T KNOW 8
460F	How many times?	NUMBER OF TIMES	NUMBER OF TIMES . . . . .
460G	An injection to prevent measles?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
461	Were any of the vaccinations (NAME) received during the last 2 years given as a part of a national immunisation day campaign or a community health day?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 462A) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 462A) DON'T KNOW 8
462	At which national immunisation day campaigns or community health day did (NAME) receive vaccinations? RECORD ALL MENTIONED.	AUG/SEPT 1999 (THIS YEAR) . . A AUG/SEPT 1998 . . . . . B AUG/SEPT 1997 . . . . . C COMMUNITY HEALTH DAY . . . . D SOME OTHER TIME . . . . . E	AUG/SEPT 1999 (THIS YEAR) . . A AUG/SEPT 1998 . . . . . B AUG/SEPT 1997 . . . . . C COMMUNITY HEALTH DAY . . . . D SOME OTHER TIME . . . . . E
462A	Has (NAME)'s birth ever been registered?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 462C) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 462C) DON'T KNOW 8
462B	Where was (NAME)'s birth registered?	GOVERNMENT REGISTRATION 1 HOSPITAL . . . . . 2 VILLAGE REGISTRATION . . . . . 3 DON'T KNOW 8	GOVERNMENT REGISTRATION 1 HOSPITAL . . . . . 2 VILLAGE REGISTRATION . . . . . 3 DON'T KNOW 8

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
462C	Does (NAME) have a birth certificate? IF YES: May I see it please? CHECK IF OFFICIAL BIRTH CERTIFICATE, NOT BAPTISM CERTIFICATE OR HOSPITAL CERTIFICATE	YES, SEEN . . . . . 1 (SKIP TO 463) YES, NOT SEEN . . . . . 2 (SKIP TO 463) NO . . . . . 3 DON'T KNOW . . . . . 8 (SKIP TO 463)	YES, SEEN . . . . . 1 (SKIP TO 463) YES, NOT SEEN . . . . . 2 (SKIP TO 463) NO . . . . . 3 DON'T KNOW . . . . . 8 (SKIP TO 463)
462D	Why is (NAME)'s birth not registered?	COSTS TOO MUCH . . . . . 1 MUST TRAVEL TOO FAR . . . . . 2 DIDN'TKNOW IT SHOULD BE . . 3 LATE, DID NOT WANT TO PAY FINE . . . . . 4 DOESN'T KNOW WHERE TO GO 5 OTHER_____6	COSTS TOO MUCH . . . . . 1 MUST TRAVEL TOO FAR . . . . . 2 DIDN'TKNOW IT SHOULD BE . . 3 LATE, DID NOT WANT TO PAY FINE . . . . . 4 DOESN'T KNOW WHERE TO GO 5 OTHER_____6
462E	Do you know where to go to register births?	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
463	Has (NAME) been ill with a fever at any time in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
464	Has (NAME) had an illness with a cough at any time in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 466) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 466) DON'T KNOW 8
465	When (NAME) had an illness with a cough, did he/she breathe faster than usual with short, fast breaths?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
466	CHECK 463 AND 464: FEVER OR COUGH?	"YES" IN 463 OR 464 ☐ OTHER ☐ (SKIP TO 472)	"YES" IN 463 OR 464 ☐ OTHER ☐ (SKIP TO 472)
467	Did you seek advice or treatment for the fever/cough from a doctor, nurse or at a medical facility?	YES . . . . . 1 NO . . . . . 2 DOES NOT KNOW 8	YES . . . . . 1 NO . . . . . 2 DOES NOT KNOW 8
469	CHECK 463: HAD FEVER?	"YES" IN 463 ☐ "NO"/"DK" IN 463 ☐ (SKIP TO 472)	"YES" IN 463 ☐ "NO"/"DK" IN 463 ☐ (SKIP TO 472)
470	Did (NAME) take any drugs for the fever?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 472) DOES NOT KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 472) DOES NOT KNOW 8
471	What drugs did (NAME) take? RECORD ALL MENTIONED. IF RESPONDENT DOES NOT KNOW TYPE OF DRUG, ASK TO SEE THE DRUG(S).	FANSIDAR . . . . . A CHLOROQUINE . . . . . B ASPIRIN . . . . . C IBUPROFEN/ACETAMINOPHEN D OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	FANSIDAR . . . . . A CHLOROQUINE . . . . . B ASPIRIN . . . . . C IBUPROFEN/ACETAMINOPHEN D OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z
472	Has (NAME) had diarrhoea in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 480) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 480) DON'T KNOW 8
473	When (NAME) had diarrhoea, was he/she offered less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was he/she offerred much less than usual to drink or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS . . . . . 2 ABOUT THE SAME . . . . . 3 MORE . . . . . 4 NOTHING TO DRINK . . . . . 5 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS . . . . . 2 ABOUT THE SAME . . . . . 3 MORE . . . . . 4 NOTHING TO DRINK . . . . . 5 DON'T KNOW 8

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
474	Was he/she offered less than usual to eat, about the same amount, or more than usual, or nothing to eat? IF LESS, PROBE: Was he/she offerred much less than usual to eat or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS . . . . . 2 ABOUT THE SAME . . . . . 3 MORE . . . . . 4 STOPPED FOOD . . . . . 5 NEVER GAVE FOOD . . . . . 6 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS . . . . . 2 ABOUT THE SAME . . . . . 3 MORE . . . . . 4 STOPPED FOOD . . . . . 5 NEVER GAVE FOOD . . . . . 6 DON'T KNOW 8
475	Was he/she given any of the following:	YES NO DK	YES NO DK
	Breast milk?	BREAST MILK 1 2 8	BREAST MILK 1 2 8
	Uji or soup?	UJI/SOUP 1 2 8	UJI/SOUP 1 2 8
	Rice water , coconut milk or fruit juice?	RICE WATER, COCONUT1. . .2 . . 8	RICE WATER, COCONUT1. . .2 . . 8
	A fluid made from a special packet called ORS or maji ya dawa kwa mtoto anayeharisha?	ORS PACKET 1 2 8	ORS PACKET 1 2 8
	Fresh or tinned milk or infant formula?	MILK, FORMULA 1 2 8	MILK, FORMULA 1 2 8
	Water?	WATER 1 2 8	WATER 1 2 8
	Coke, tea, soda?	COKE, TEA, SODA 1 2 8	COKE, TEA, SODA 1 2 8
	Nothing to drink?	NOTHING TO DRINK . . . 1 2 8	NOTHING TO DRINK . . . 1 2 8
476	Did you seek advice or treatment for the diarrhoea from a doctor, nurse or at a medical facility?	YES . . . . . 1 NO . . . . . 2 DOES NOT KNOW 8	YES . . . . . 1 NO . . . . . 2 DOES NOT KNOW 8
480		GO BACK TO 453 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 481.	GO BACK TO 453 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 481.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
481	Aside from the tetanus injections during your last pregnancy, did you receive any tetanus injection at any time before your last pregnancy, either during a previous pregnancy or between pregnancies?	YES . . . . . 1 NO . . . . . 2 DOES NOT KNOW 8	 →484 →484
482	How many doses did you receive before your last pregnancy?	NUMBER OF DOSES . . . . . ☐	
483	When did you receive the last dose?	YEARS AGO . . . . . ☐☐ DOES NOT KNOW 98	
484	When a child is ill, what signs of illness tell you that you should take the child to a health facility immediately?	CHILD DRINKING POORLY . . . . . A CHILD BECOMES SICKER . . . . . B CHILD DEVELOPS A FEVER . . . . . C CHILD HAS FAST BREATHING . . . . . D CHILD HAS DIFFICULT BREATHING E CHILD HAS BLOODY STOOLS . . . . . F OTHER _____ X OTHER _____ Y DOES NOT KNOW . . . . . Z	
485	When a woman is pregnant, what signs indicate that she may have a serious problem or complication and she should get medical treatment immediately?	SHE HAS A FEVER . . . . . A SWOLLEN HANDS OR FEET . . . . . B SHE IS BLEEDING TOO MUCH . . . . . C OTHER _____ X OTHER _____ Y DOES NOT KNOW . . . . . Z	
486	How long should a mother breastfeed her baby without giving the baby any other food or liquid other than breast milk?	MONTHS . . . . . ☐☐ OTHER _____ 96 DOES NOT KNOW 98	

SECTION 5. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	Are you currently married or living with a man?	YES, CURRENTLY MARRIED . . . . . 1 YES, LIVING WITH A MAN . . . . . 2 NO, NOT IN UNION 3	→505
502	Have you ever been married or lived with a man?	YES, FORMERLY MARRIED . . . . . 1 YES, LIVED WITH A MAN . . . . . 2 NO 3	→507 →514
504	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED . . . . . 1 DIVORCED . . . . . 2 SEPARATED 3	→507
505	Is your husband/partner living with you now or is he staying elsewhere?	LIVING WITH HER . . . . . 1 STAYING ELSEWHERE 2	
506	RECORD THE HUSBAND'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME _____ LINE NO.	
507	Have you been married or lived with a man only once, or more than once?	ONCE . . . . . 1 MORE THAN ONCE 2	
508	CHECK 507: MARRIED/ LIVED WITH A MAN ONLY ONCE ▼ In what month and year did you start living with your husband/partner? MARRIED/ LIVED WITH A MAN MORE THAN ONCE ▼ Now we will talk about your first husband/partner. In what month and year did you start living with him?	MONTH . . . . . DON'T KNOW MONTH . . . . . 98 YEAR . . . . . DON'T KNOW YEAR 9998	→514
509	How old were you when you started living with him?	AGE	
514	Now I need to ask you some questions about sexual activity in order to gain a better understanding of some family life issues. How old were you when you first had sexual intercourse (if ever)?	NEVER . . . . . 00 AGE IN YEARS . . . . . FIRST TIME WHEN STARTED LIVING WITH (FIRST) HUSBAND/PARTNER 96	→524
515	When was the last time you had sexual intercourse? RECORD 'YEARS AGO' ONLY IF LAST INTERCOURSE WAS ONE OR MORE YEARS AGO.	DAYS AGO . . . . . 1 WEEKS AGO . . . . . 2 MONTHS AGO . . . . . 3 YEARS AGO 4	→524
516	The last time you had sexual intercourse, was a condom used?	YES . . . . . 1 NO 2	
517	What is your relationship to the man with whom you last had sex? IF "GIRLFRIEND" OR "FIANCEE", ASK: Was your boyfriend/fiance living with you when you last had sex? IF YES, RECORD '1'. IF NO, RECORD '2'.	HUSBAND/COHABITING PARTNER . 1 BOYFRIEND/FIANCE . . . . . 2 OTHER FRIEND . . . . . 3 CASUAL ACQUAINTANCE . . . . . 4 COMMERCIAL SEX WORKER . . . . . 5 RELATIVE . . . . . 6 OTHER _____ 7 (SPECIFY)	→519

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
518	For how long have you had a sexual relationship with this man?	DAYS . . . . . 1 [ ][ ] WEEKS . . . . . 2 [ ][ ] MONTHS . . . . . 3 [ ][ ] YEARS . . . . . 4 [ ][ ]	
519	Have you had sex with anyone else in the last 12 months?	YES . . . . . 1 NO 2	 →524
520	The last time you had sexual intercourse with another man, was a condom used?	YES . . . . . 1 NO 2	
521	What is your relationship to this other man? IF "GIRLFRIEND" OR "FIANCEE", ASK: Was your boyfriend/fiance living with you when you last had sex? IF YES, RECORD '1'. IF NO, RECORD '2'.	HUSBAND/COHABITING PARTNER . 1 BOYFRIEND/FIANCE . . . . . 2 OTHER FRIEND . . . . . 3 CASUAL ACQUAINTANCE . . . . . 4 COMMERCIAL SEX WORKER . . . . . 5 RELATIVE . . . . . 6 OTHER _____ 7 (SPECIFY)	→523
522	For how long have you had a sexual relationship with this man?	DAYS . . . . . 1 [ ][ ] WEEKS . . . . . 2 [ ][ ] MONTHS . . . . . 3 [ ][ ] YEARS . . . . . 4 [ ][ ]	
523	In total, how many men have you had sex with in the last 12 months?	NUMBER OF PARTNERS . . . [ ][ ]	
524	Do you know of a place where one can get condoms?	YES . . . . . 1 NO 2	 →526
525	Where is that? IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	GOVERNMENT/PUBLIC SECTOR REGIONAL/CONSULTANT HOSP 11 DISTRICT HOSPITAL . . . . . 12 GOVT. HEALTH CENTRE . . . . . 13 DISPENSARY/PARASTATAL FACILITY . . . . . 14 VILLAGE HEALTH POST/WORKER 15 PRIVATE MEDICAL SECTOR RELIGIOUS ORGANISATION FACILITY/MISSION HOSP . . . . . 21 PRIVATE DOCTOR/CLINIC/HOSP 22 PHARMACY/MEDICAL STORE . . . 23 CBD WORKER . . . . . 24 OTHER PRIVATE SECTOR SHOP/KIOSK . . . . . 31 CHURCH . . . . . 32 FRIEND/RELATIVE/NEIGHBOUR . 33 HEALTH EDUCATION/BAR GIRLS 34 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
526	Is it acceptable for a woman to ask a man to use a condom?	YES . . . . . 1 NO . . . . . 2 DOES NOT KNOW 8	
527	What if a woman's husband has a sexually transmitted disease. Would it be acceptable for her to ask him to use a condom or to refuse to have sex with him?	YES . . . . . 1 NO . . . . . 2 DOES NOT KNOW 8	

SECTION 6. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	CHECK 311/311A: NEITHER STERILISED ☐ ▼ HE OR SHE STERILISED ☐		→613
602	CHECK 226: NOT PREGNANT OR UNSURE ☐ ▼ PREGNANT ☐ ▼ Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children? Now I have some questions about the future. After the child you are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 SAYS SHE CAN'T GET PREGNANT . 3 UNDECIDED/DON'T KNOW 8	→604 →609 →608
603	CHECK 226: NOT PREGNANT OR UNSURE ☐ ▼ PREGNANT ☐ ▼ How long would you like to wait from now before the birth of (a/another) child? After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 SAYS SHE CAN'T GET PREGNANT 994 AFTER MARRIAGE . . . . . 995 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	→609
604	CHECK 226: NOT PREGNANT OR UNSURE ☐ ▼ PREGNANT ☐		→610
605	CHECK 310: USING A METHOD? NOT ASKED ☐ ▼ NOT CURRENTLY USING ☐ ▼ CURRENTLY USING ☐		→608
606	CHECK 603: NOT ASKED ☐ ▼ 24 OR MORE MONTHS OR 02 OR MORE YEARS ☐ ▼ 00-23 MONTHS OR 00-01 YEAR ☐		→610
607	CHECK 602: WANTS A/ANOTHER CHILD ☐ ▼ WANTS NO (MORE) CHILDREN ☐ ▼ You have said that you do not want (a/another) child soon, but you are not using any method to avoid pregnancy. Can you tell me why? You have said that you do not want any (more) children, but you are not using any method to avoid pregnancy. Can you tell me why? RECORD ALL MENTIONED.	NOT MARRIED . . . . . A FERTILITY-RELATED REASONS NOT HAVING SEX . . . . . B INFREQUENT SEX . . . . . C MENOPAUSAL/HYSTERECTOMY. . D SUBFECUND/INFECUND . . . . . E POSTPARTUM AMENORRHEIC . . . F BREASTFEEDING . . . . . G FATALISTIC . . . . . H OPPOSITION TO USE RESPONDENT OPPOSED . . . . . I HUSBAND/PARTNER OPPOSED . . . J OTHERS OPPOSED . . . . . K RELIGIOUS PROHIBITION . . . . . L LACK OF KNOWLEDGE KNOWS NO METHOD . . . . . M KNOWS NO SOURCE . . . . . N METHOD-RELATED REASONS HEALTH CONCERNS . . . . . O FEAR OF SIDE EFFECTS . . . . . P LACK OF ACCESS/TOO FAR . . . . . Q COST TOO MUCH . . . . . R INCONVENIENT TO USE . . . . . S INTERFERES WITH BODY'S NATURAL PROCESSES . . . . . T OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
608	In the next few weeks, if you discovered that you were pregnant, would that be a big problem, a small problem, or no problem for you? IF WOMAN IS PREGNANT, DO NOT ASK, BUT WRITE 'PREGNANT'	BIG PROBLEM . . . . . 1 SMALL PROBLEM . . . . . 2 NO PROBLEM . . . . . 3 SAYS SHE CAN'T GET PREGNANT . 4	
609	CHECK 310: USING A METHOD? NOT ASKED ☐ ▼ NOT CURRENTLY USING ☐ ▼ CURRENTLY USING ☐ → 613		
610	Do you think you will use a method to delay or avoid pregnancy within the next 12 months?	YES . . . . . 1 NO . . . . . 2 DOES NOT KNOW 8	→ 613
612	What is the main reason that you think you will not use a method in the next 12 months?	NOT MARRIED . . . . . A FERTILITY-RELATED REASONS NOT HAVING SEX . . . . . B INFREQUENT SEX . . . . . C MENOPAUSAL/HYSTERECTOMY . D SUBFECUND/INFECUND . . . . . E POSTPARTUM/AMENORRHOEIC . F BREASTFEEDING . . . . . G WANTS AS MANY CHILDREN AS POSSIBLE . . . . . H OPPOSITION TO USE RESPONDENT OPPOSED . . . . . I HUSBAND/PARTNER OPPOSED . . . J OTHERS OPPOSED . . . . . K RELIGIOUS PROHIBITION . . . . . L LACK OF KNOWLEDGE KNOWS NO METHOD . . . . . M KNOWS NO SOURCE . . . . . N METHOD-RELATED REASONS HEALTH CONCERNS . . . . . O FEAR OF SIDE EFFECTS . . . . . P LACK OF ACCESS/TOO FAR . . . . . Q COST TOO MUCH . . . . . R INCONVENIENT TO USE . . . . . S INTERFERES WITH BODY'S NORMAL PROCESSES . . . . . T OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
613	CHECK 216: HAS LIVING CHILDREN ☐ ▼ If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILDREN ☐ ▼ If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NUMBER . . . . . ☐☐ OTHER _____ 96 (SPECIFY)	
616	Would you say that you approve or disapprove of couples using a method to avoid getting pregnant?	APPROVE . . . . . 1 DISAPPROVE . . . . . 2 DON'T KNOW/UNSURE 3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
617	In the last six months have you heard about family planning:	YES NO	
	On the radio?	RADIO 1 2	
	On the television?	TELEVISION 1 2	
	In a newspaper or magazine?	NEWSPAPER OR MAGAZINE . 1 2	
	From a poster?	POSTER 1 2	
	From a leaflet or pamphlet?	LEAFLET/PAMPHLET 1 2	
	From billboards?	BILLBOARDS 1 2	
	At community events?	COMMUNITY EVENT 1 2	
	From live drama?	LIVE DRAMA 1 2	
	From a doctor or a nurse?	DOCTOR OR NURSE 1 2	
618	In the last six months, what drama series have you listened to on the radio? CIRCLE THE SERIES MENTIONED SPONTANEOUSLY. FOR THOSE NOT MENTIONED, ASK: In the last 6 months, have you listened to:	YES, SPON TAN- EOUS / YES, PRO- BED / NO	
	Zinduka, a radio show featuring a character named Dr.Kurwa?	ZINDUKA 1 2 3	
	Twende na Wakati, a show featuring a character named Mkwaju?	TWENDE NA WAKATI . 1 2 3	
	Geuza Mwendo?	GEUZA MWENDO 1 2 3	
	Ukimwi Kifo?	UKIMWI KIFO 1 2 3	
	Sema Naye?	SEMA NAYE 1 2 3	
	Vijana wetu?	VIJANA WETU 1 2 3	
618A	CHECK 618: LISTENED TO ZINDUKA ☐ ▼ DID NOT LISTEN TO ZINDUKA ☐		→618E
618B	How often do you listen to Zinduka?	TWICE A WEEK . . . . . 1 ONCE A WEEK . . . . . 2 ONCE OR TWICE A MONTH . . . . . 3 RARELY . . . . . 4 DOES NOT KNOW 8	
618C	As a result of listening to Zinduka, did you do anything or take any action related to family planning?	YES . . . . . 1 NO . . . . . 2 →618E DOES NOT KNOW . . . . . 8 →618E	
618D	What did you do as a result of listening to Zinduka? RECORD ALL MENTIONED.	TALKED TO PARTNER . . . . . A TALKED TO HEALTH WORKER . . . . B TALKED TO SOMEONE ELSE . . . . . C WENT TO CLINIC FOR FAM.PLAN. . . D BEGAN USING MODERN METHOD . E BEGAN USING CONDOMS . . . . . F OTHER _____ X (SPECIFY)	
618E	CHECK 618: LISTENED TO TWENDE ☐ ▼ DID NOT LISTEN TO TWENDE ☐		→618I

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
618F	How often do you listen to Twende na Wakati?	TWICE A WEEK . . . . . 1 ONCE A WEEK . . . . . 2 ONCE OR TWICE A MONTH . . . . . 3 RARELY . . . . . 4 DOES NOT KNOW 8	
618G	As a result of listening to Twende na Wakati, did you do anything or take any action related to family planning or health?	YES . . . . . 1 NO . . . . . 2 →618I DOES NOT KNOW . . . . . 8 →618I	
618H	What did you do as a result of listening to Twende na Wakati? RECORD ALL MENTIONED.	TALKED TO PARTNER . . . . . A TALKED TO HEALTH WORKER . . . . B TALKED TO SOMEONE ELSE . . . . . C WENT TO CLINIC FOR FAM.PLAN. . . D BEGAN USING MODERN METHOD . E BEGAN USING CONDOMS . . . . . F OTHER _____ X (SPECIFY)	
618I	CHECK 618: LISTENED TO VIJANA WETU ☐ ▼ DID NOT LISTEN TO VIJANA WETU ☐		→619
618J	How often do you listen to Vijana Wetu?	TWICE A WEEK . . . . . 1 ONCE A WEEK . . . . . 2 ONCE OR TWICE A MONTH . . . . . 3 RARELY . . . . . 4 DOES NOT KNOW 8	
618K	As a result of listening to Vijana Wetu, did you do anything or take any action related to family planning or health?	YES . . . . . 1 NO . . . . . 2 →619 DOES NOT KNOW . . . . . 8 →619	
618L	What did you do as a result of listening to Vijana Wetu? RECORD ALL MENTIONED.	TALKED TO PARTNER . . . . . A TALKED TO HEALTH WORKER . . . . B TALKED TO PARENT, TEACHER . . . C WENT TO CLINIC, YOUTH CENTRE . D BEGAN USING MODERN METHOD . E BEGAN USING CONDOMS . . . . . F OTHER _____ X (SPECIFY)	
619	In the last 6 months, have you heard or seen a message about Salama condoms?	YES . . . . . 1 NO . . . . . 2 →621 DOES NOT KNOW . . . . . 8 →621	
620	Where did you hear or see the message about Salama condoms? DO NOT READ CODES. RECORD ALL MENTIONED.	RADIO . . . . . A TELEVISION . . . . . B NEWSPAPER OR MAGAZINE . . . . . C POSTER . . . . . D LEAFLET OR PAMPHLET . . . . . E BILLBOARD . . . . . F COMMUNITY EVENT . . . . . G LIVE DRAMA . . . . . H SALES REPRESENTATIVE . . . . . I OTHER X	
621	CHECK 501: YES, CURRENTLY MARRIED ☐ ▼ YES, LIVING WITH A MAN ☐ ▼ NO, NOT IN UNION ☐		→701
622	Now I want to ask you about your husband's/partner's views on family planning. Do you think that your husband/partner approves or disapproves of couples using a method to avoid pregnancy?	APPROVES . . . . . 1 DISAPPROVES . . . . . 2 DON'T KNOW 8	
623	How often have you talked to your husband/partner about family planning in the past year?	NEVER . . . . . 1 ONCE OR TWICE . . . . . 2 MORE OFTEN 3	

SECTION 7. WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	Aside from your own housework, are you currently working?	YES . . . . . 1 NO 2	→704
702	As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. Are you currently doing any of these things or any other work?	YES . . . . . 1 NO 2	→704
703	Have you done any work in the last 12 months?	YES . . . . . 1 NO 2	→801
704	What is your occupation, that is, what kind of work do you mainly do?	_____ ☐☐ _____ _____	
705	CHECK 704: WORKS IN AGRICULTURE ☐ ▼ DOES NOT WORK IN AGRICULTURE ☐		→707
706	Do you work mainly on your own land or on family land, or do you work on land that you rent from someone else, or do you work on someone else's land?	OWN LAND . . . . . 1 FAMILY LAND . . . . . 2 RENTED LAND . . . . . 3 SOMEONE ELSE'S LAND 4	
707	Do you do this work for a member of your family, for someone else, or are you self-employed?	FOR FAMILY MEMBER . . . . . 1 FOR SOMEONE ELSE . . . . . 2 SELF-EMPLOYED 3	
708	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR . . . . . 1 SEASONALLY/PART OF THE YEAR . 2 ONCE IN A WHILE 3	
709	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY . . . . . 1 CASH AND KIND . . . . . 2 IN KIND ONLY . . . . . 3 NOT PAID 4	

SECTION 8: AIDS AND OTHER SEXUALLY TRANSMITTED DISEASES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	Now I would like to talk about something else. Have you ever heard of the virus HIV or an illness called AIDS?	YES . . . . . 1 NO 2	→821
802	Is there anything a person can do to avoid getting infected with HIV, the virus that causes AIDS?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→809
803	What can a person do? Anything else? RECORD ALL MENTIONED.	ABSTAIN FROM SEX . . . . . A USE CONDOMS . . . . . B LIMIT SEX TO ONE PARTNER/STAY FAITHFUL TO ONE PARTNER . . . . C LIMIT NUMBER OF SEX PARTNERS D AVOID SEX WITH PROSTITUTES . . . E AVOID SEX WITH PERSONS WHO HAVE MANY PARTNERS . . . . . F AVOID SEX WITH HOMOSEXUALS . G AVOID SEX WITH PERSONS WHO INJECT DRUGS INTRAVENOUSLY H AVOID BLOOD TRANSFUSIONS . . . . . I AVOID INJECTIONS . . . . . J AVOID KISSING . . . . . K AVOID MOSQUITO BITES . . . . . L SEEK PROTECTION FROM TRADITIONAL HEALER . . . . . M AVOID SHARING RAZORS/BLADES . N OTHER _____ W OTHER _____ X DON'T KNOW . . . . . Z	
804	Can people protect themselves from getting the AIDS virus by having just one sex partner who has no other partners?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
805	Can a person get the AIDS virus from mosquito bites?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
806	Can people protect themselves from getting the AIDS virus by using a condom every time they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
807	Can people protect themselves from getting the AIDS virus by not sharing food with a person who has AIDS?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
808	Can people protect themselves from getting the AIDS virus by abstaining completely from sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
809	Is it possible for a healthy-looking person to have the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
811	Do you know someone personally who has the virus that causes AIDS or someone who died from AIDS?	YES . . . . . 1 NO 2	
812	Can the virus that causes AIDS be transmitted from a mother to a child?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→814
813	When can the virus that causes AIDS be transmitted from a mother to a child? Can it be transmitted: During pregnancy? During delivery? During breastfeeding?	YES NO DK PREGNANCY . . . . . 1 2 8 DURING DELIVERY . . . 1 2 8 BREASTFEEDING 1 2 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
814	Do you think your chances of getting AIDS are small, moderate, great or no risk at all?	SMALL . . . . . 1 MODERATE . . . . . 2 GREAT . . . . . 3 NO RISK AT ALL . . . . . 4 DOES NOT KNOW . . . . . 8 HAS AIDS 6	 →816 →816 →817 →817
815	Why do you think that you have (NO CHANCE/SMALL CHANCE) of getting AIDS? Any other reasons? RECORD ALL MENTIONED.	NO SEXUAL INTERCOURSE . . . . . A PARTNER HAS NO OTHER WOMEN B SLEEPS ONLY WITH ONE PARTNER C USES CONDOMS . . . . . D OTHER _____ X (SPECIFY)	→817
816	Why do you think that you have a (MODERATE/GREAT) risk or getting AIDS? Any others reasons? RECORD ALL MENTIONED.	HAS MULTIPLE PARTNERS . . . . . A PARTNER HAS OTHER WOMEN . . . B DOES NOT USE CONDOMS . . . . . C HAD INJECTION, BLOOD TRANSFUS D OTHER _____ X (SPECIFY)	
817	Have you ever been tested to see if you have the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DOES NOT KNOW/NOT SURE 8	→821
818	Would you like to be tested for the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DOES NOT KNOW/NOT SURE 8	 →820 →820
819	Why haven't you gotten tested for the AIDS virus?	DOES NOT KNOW WHERE TO GO . A COSTS TOO MUCH . . . . . B AFRAID TO GET RESULTS . . . . . C DOES NOT HAVE TIME TO GO . . . . . D OTHER _____ X (SPECIFY)	
820	Do you know a place where you could go to get an AIDS test?	YES . . . . . 1 NO 2	
821	Do you know any methods that can protect against pregnancy as well as protecting against sexual diseases?	PILL, ORAL CONTRACEPTIVE . . . . . 1 CONDOM . . . . . 2 OTHER _____ 6 (SPECIFY) DOES NOT KNOW ANY METHODS . 8	
822	RECORD THE TIME.	HOUR . . . . . ☐☐ MINUTES . . . . . ☐☐ MORNING . . . . . 1 AFTERNOON . . . . . 2 EVENING, NIGHT 3	

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT RESPONDENT:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

NAME OF THE SUPERVISOR:_____
. DATE: _____

EDITOR'S OBSERVATIONS

NAME OF EDITOR:_____
. DATE: _____

TANZANIA REPRODUCTIVE AND CHILD HEALTH SURVEY
MAN'S QUESTIONNAIRE
FOR ALL MEN AGE 15-59

IDENTIFICATION

REGION _____

DISTRICT _____

WARD . . . . . .

E.A. NUMBER . . . . . .

TRCHS CLUSTER NUMBER . . . . . .

HOUSEHOLD NUMBER . . . . . .

DAR ES SALAAM=1, SMALL CITY* =2, TOWN=3, RURAL/VILLAGE=4 . . . . . .

NAME OF HOUSEHOLD HEAD _____

NAME AND LINE NUMBER OF MAN _____

* Small cities are: Mwanza, Arusha, Morogoro, Dodoma, Moshi, Tanga, Iringa, Mbeya, and Tabora. All other urban areas are towns.

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY
				MONTH
				YEAR 1 9
INTERVIEWER'S NAME				INTER. ID NO.
RESULT*				RESULT
NEXT VISIT: DATE				TOTAL NO. OF VISITS
TIME				

*RESULT CODES:

. . . . .	1	COMPLETED
. . . . .	2	NOT AT HOME
. . . . .	3	POSTPONED
. . . . .	4	REFUSED
. . . . .	5	PARTLY COMPLETED
. . . . .	6	INCAPACITATED
. . . . .	7	OTHER
. . . . .		
. . . . .		
. . . . .		
. . . . .		
. . . . .		
. . . . .		
. . . . .		
. . . . .		(SPECIFY)

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____	NAME _____		
DATE _____	DATE _____		

SECTION 1. RESPONDENT'S BACKGROUND

INTRODUCTION

Hello. My name is _____ and I am working with the National Bureau of Statistics. We are conducting a national survey about the health of women and men and children. We would very much appreciate your participation in this survey. I would like to ask you about your health. This information will help the government to plan health services. The survey usually takes between 20 and 45 minutes to complete. Whatever information you provide will be kept strictly confidential and will not be shown to other persons.

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey?
May I begin the interview now?

Signature of interviewer: _____
_____
_____
_____ Date: ___
_____

RESPONDENT AGREES TO BE INTERVIEWED . . . . . 1 ▼ RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . . . . 2 →END

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOUR . . . . . ☐☐ MINUTES . . . . . ☐☐ MORNING . . . . . 1 AFTERNOON . . . . . 2 EVENING, NIGHT 3	
102	First I would like to ask some questions about you and your household. For most of the time until you were 12 years old, did you live in Dar es Salaam, another urban area or in a rural area?	DAR ES SALAAM . . . . . 1 OTHER URBAN AREA . . . . . 2 RURAL AREA/VILLAGE 3	
103	How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)? IF LESS THAN ONE YEAR, RECORD '00' YEARS.	YEARS . . . . . ☐☐ ALWAYS . . . . . 95 VISITOR 96	→105
104	Just before you moved here, did you live in Dar es Salaam, another urban area or in a rural area?	DAR ES SALAAM . . . . . 1 OTHER URBAN AREA . . . . . 2 RURAL AREA/VILLAGE 3	
105	In what month and year were you born?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	
106	How old were you at your last birthday? COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.	AGE IN COMPLETED YEARS . . . . . ☐☐	
107	Have you ever attended school?	YES . . . . . 1 NO 2	→111
108	What is the highest formal school you completed?	LESS THAN ONE YEAR . . . . . 00 STANDARD 1 . . . . . 01 STANDARD 2 . . . . . 02 STANDARD 3 . . . . . 03 STANDARD 4 . . . . . 04 STANDARD 5 . . . . . 05 STANDARD 6 . . . . . 06 STANDARD 7 . . . . . 07 STANDARD 8 . . . . . 08 FORM 1 . . . . . 09 FORM 2 . . . . . 10 FORM 3 . . . . . 11 FORM 4 . . . . . 12 FORM 5 . . . . . 13 FORM 6 . . . . . 14 UNIVERSITY . . . . . 15 OTHER_____ 96	
110	CHECK 108: STANDARD 8 OR LESS ☐ ▼ FORM 1 OR HIGHER ☐_____		→114

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
111	Now I would like you to read out loud as much of this sentence as you can. SHOW CARD TO RESPONDENT.	CANNOT READ AT ALL . . . . . 1 ABLE TO READ ONLY PARTS OF SENTENCE . . . . . 2 ABLE TO READ WHOLE SENTENCE . . . . . 3 NO CARD, REFUSED, OTHER 4	→115
114	Do you read a newspaper or magazine almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
115	Do you listen to the radio almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
116	Do you watch television almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
117	What is your religion?	MOSLEM . . . . . 1 CATHOLIC . . . . . 2 PROTESTANT . . . . . 3 NONE . . . . . 4 OTHER 6	
118	Do you have any children? I mean your own children, not ones you may have adopted or are caring for but are not your own biological children.	YES . . . . . 1 NO 2	→301
119	How many sons do you have? And how many daughters do you have? IF NONE, RECORD '00'.	SONS . . . . . ☐☐ DAUGHTERS . . . . . ☐☐	
120	So you have TOTAL _____ children. Is that correct?	TOTAL . . . . . ☐☐	

NOTE: THERE IS NO SECTION 2 IN THE MAN'S QUESTIONNAIRE.

SECTION 3. CONTRACEPTION

Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy.

CIRCLE CODE 1 IN 301 FOR EACH METHOD MENTIONED SPONTANEOUSLY. THEN PROCEED DOWN COLUMN 301, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY. CIRCLE CODE 1 IF METHOD IS RECOGNISED, AND CODE 2 IF NOT RECOGNISED. THEN, FOR EACH METHOD WITH CODE 1 CIRCLED IN 301, ASK 302.

301	Which ways or methods have you heard about? FOR METHODS NOT MENTIONED SPONTANEOUSLY, ASK: Have you ever heard of (METHOD)?		302 Have you ever used (METHOD)?
01	FEMALE STERILISATION, TUBAL LIGATION, TL. Women can have an operation to avoid having any more children.	YES . . . . . 1 NO . . . . . 2 ▾	Have you ever had a partner who had an operation to avoid having any more children? YES . . . . . 1 NO 2
02	MALE STERILISATION, VASECTOMY. Men can have an operation to avoid having any more children.	YES . . . . . 1 NO . . . . . 2 ▾	Have you ever had an operation to avoid having any more children? YES . . . . . 1 NO 2
03	PILL Women can take a pill every day	YES . . . . . 1 NO . . . . . 2 ▾	YES . . . . . 1 NO 2
04	IUD Women can have a loop or coil placed inside them by a doctor or a nurse.	YES . . . . . 1 NO . . . . . 2 ▾	YES . . . . . 1 NO 2
05	INJECTIONS Women can have an injection by a doctor or nurse which stops them from becoming pregnant for several months.	YES . . . . . 1 NO . . . . . 2 ▾	YES . . . . . 1 NO 2
06	IMPLANTS Women can have several small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for several years.	YES . . . . . 1 NO . . . . . 2 ▾	YES . . . . . 1 NO 2
07	CONDOM Men can put a rubber sheath on their penis before sexual intercourse.	YES . . . . . 1 NO . . . . . 2 ▾	YES . . . . . 1 NO 2
08	FEMALE CONDOM Women can place a sheath in their vagina before sexual intercourse.	YES . . . . . 1 NO . . . . . 2 ▾	YES . . . . . 1 NO 2
09	DIAPHRAGM, FOAM OR JELLY Women can place a sponge, suppository, diaphragm, jelly, or foam in their vagina before intercourse.	YES . . . . . 1 NO . . . . . 2 ▾	YES . . . . . 1 NO 2
10	LACTATIONAL AMENORRHOEA METHOD (LAM) Up to 6 months after childbirth, a woman can use a method that requires that she breastfeeds frequently, day and night, and that her menstrual period has not returned .	YES . . . . . 1 NO . . . . . 2 ▾	YES . . . . . 1 NO 2
11	RHYTHM OR CALENDAR METHOD Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse on the days of the month she is most likely to get pregnant.	YES . . . . . 1 NO . . . . . 2 ▾	YES . . . . . 1 NO 2
12	WITHDRAWAL Men can be careful and pull out before climax.	YES . . . . . 1 NO . . . . . 2 ▾	YES . . . . . 1 NO 2
13	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES . . . . . 1 _____ (SPECIFY) _____ (SPECIFY) NO 2 ▾	YES . . . . . 1 NO . . . . . 2 YES . . . . . 1 NO 2

303	CHECK 302: NOT A SINGLE "YES" (NEVER USED) ▾	AT LEAST ONE "YES" (EVER USED)	→310

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
304	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	→328
306	What have you used or done? CORRECT 302 AND 303 (AND 301 IF NECESSARY).		
310	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	→328
311	Which method are you using?	FEMALE STERILISATION . . . . . A MALE STERILISATION . . . . . B PILL . . . . . C IUD . . . . . D INJECTIONS . . . . . E IMPLANTS . . . . . F	→319
311A	CIRCLE 'A' FOR FEMALE STERILISATION. IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD ON LIST.	CONDOM . . . . . G FEMALE CONDOM . . . . . H DIAPHRAGM/FOAM/JELLY . . . . . I LACT. AMEN. METHOD . . . . . J PERIODIC ABSTINENCE . . . . . K WITHDRAWAL . . . . . L OTHER _____ X (SPECIFY)	→318 →319
313	Where did the sterilisation take place? IF SOURCE IS HOSPITAL, HEALTH CENTRE, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	GOVERNMENT/PUBLIC SECTOR REGIONAL/CONSULTANT HOSP 11 DISTRICT HOSPITAL . . . . . 12 GOVT. HEALTH CENTRE . . . . . 13 DISPENSARY/PARASTATAL FACILITY . . . . . 14 PRIVATE MEDICAL SECTOR RELIGIOUS ORGANISATION FACILITY/MISSION HOSP . . . . . 21 PRIVATE DOCTOR/CLINIC/HOSP 22 OTHER PRIVATE MEDICAL _____ 26 (SPECIFY) OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
316	In what month and year was the sterilisation performed?	MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	→333
318	What brand of condoms did you use the last time?	BRAND NAME _____ ☐☐ DOES NOT KNOW 98	
319	For how many months have you been using (METHOD) continuously? IF LESS THAN 1 MONTH RECORD '00'.	MONTHS . . . . . ☐☐ 8 YEARS OR LONGER 96	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
327	Where did you obtain (CURRENT METHOD) the last time? IF SOURCE IS HOSPITAL, HEALTH CENTRE, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	GOVERNMENT/PUBLIC SECTOR REGIONAL/CONSULTANT HOSP 11 DISTRICT HOSPITAL . . . . . 12 GOVT. HEALTH CENTRE . . . . . 13 DISPENSARY/PARASTATAL FACILITY . . . . . 14 VILLAGE HEALTH POST/WORKER 15 PRIVATE MEDICAL SECTOR RELIGIOUS ORGANISATION FACILITY/MISSION HOSP . . . . . 21 PRIVATE DOCTOR/CLINIC/HOSP 22 PHARMACY/MEDICAL STORE . . . 23 CBD WORKER . . . . . 24 OTHER PRIVATE SECTOR SHOP/KIOSK . . . . . 31 CHURCH . . . . . 32 FRIEND/RELATIVE/NEIGHBOUR . 33 HEALTH EDUCATION/BAR GIRLS 34 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	→333
328	Do you know of a place where you can obtain a method of family planning?	YES . . . . . 1 NO 2	→333
329	Where is that? IF SOURCE IS HOSPITAL, HEALTH CENTRE, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	GOVERNMENT/PUBLIC SECTOR REGIONAL/CONSULTANT HOSP 11 DISTRICT HOSPITAL . . . . . 12 GOVT. HEALTH CENTRE . . . . . 13 DISPENSARY/PARASTATAL FACILITY . . . . . 14 VILLAGE HEALTH POST/WORKER 15 PRIVATE MEDICAL SECTOR RELIGIOUS ORGANISATION FACILITY/MISSION HOSP . . . . . 21 PRIVATE DOCTOR/CLINIC/HOSP 22 PHARMACY/MEDICAL STORE . . . 23 CBD WORKER . . . . . 24 OTHER PRIVATE SECTOR SHOP/KIOSK . . . . . 31 CHURCH . . . . . 32 FRIEND/RELATIVE/NEIGHBOUR . 33 HEALTH EDUCATION/BAR GIRLS 34 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
333	Have you seen or heard of the Green Star symbol?	YES . . . . . 1 NO . . . . . 2 DOES NOT KNOW 8	→401 →401
334	What does the Green Star symbol mean to you?	FAMILY PLANNING . . . . . 1 SOMETHING ELSE . . . . . 2 DOES NOT KNOW 8	
335	How did you learn about the Green Star?	BILLBOARDS . . . . . A POSTERS . . . . . B LEAFLETS . . . . . C RADIO . . . . . D CLINIC SIGN . . . . . E SERVICE PROVIDER . . . . . F OTHER _____ X (SPECIFY)	

SECTION 4. HEALTH

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
401	When a woman is pregnant, what signs indicate that she may have a serious problem or complication and she should get medical treatment immediately?	SHE HAS A FEVER . . . . . A SWOLLEN HANDS OR FEET . . . . . B SHE IS BLEEDING TOO MUCH . . . . . C OTHER _____ X OTHER _____ Y DOES NOT KNOW . . . . . Z	
402	How long should a mother breastfeed her baby without giving the baby any other food or liquid other than breast milk?	MONTHS . . . . . ☐☐ OTHER _____ 96 DOES NOT KNOW 98	

SECTION 5. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	Are you currently married or living with a woman?	YES, CURRENTLY MARRIED . . . . . 1 YES, LIVING WITH A WOMAN . . . . . 2 NO, NOT IN UNION 3	→505
502	Have you ever been married or lived with a woman?	YES, FORMERLY MARRIED . . . . . 1 YES, LIVED WITH A WOMAN . . . . . 2 NO 3	→507 →514
504	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED . . . . . 1 DIVORCED . . . . . 2 SEPARATED 3	→507
505	Is your wife/partner living with you now or is she staying elsewhere?	LIVING WITH HIM . . . . . 1 STAYING ELSEWHERE 2	
506	RECORD THE WIFE'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF SHE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'. IF THERE ARE TWO WIVES IN THE HOUSEHOLD, RECORD THE NAME AND LINE NUMBERS OF BOTH.	NAME _____ LINE NO. . . . . [ ][ ] NAME _____ LINE NO. . . . . [ ][ ]	
507	Have you been married or lived with a woman only once, or more than once?	ONCE . . . . . 1 MORE THAN ONCE 2	
508	CHECK 507: MARRIED OR LIVED WITH A WOMAN ONLY ONCE ☐ → In what month and year did you start living with your wife/partner? MARRIED OR LIVED WITH A WOMAN MORE THAN ONCE ☐ → Now we will talk about your first wife/partner. In what month and year did you start living with her?	MONTH . . . . . [ ][ ] DON'T KNOW MONTH . . . . . 98 YEAR . . . . . [ ][ ][ ][ ] DON'T KNOW YEAR 9998	→514
509	How old were you when you started living with her?	AGE . . . . . [ ][ ]	
514	Now I need to ask you some questions about sexual activity in order to gain a better understanding of some family life issues. How old were you when you first had sexual intercourse (if ever)?	NEVER . . . . . 00 AGE IN YEARS . . . . . [ ][ ] FIRST TIME WHEN STARTED LIVING WITH (FIRST) WIFE/PARTNER 96	→524
515	When was the last time you had sexual intercourse? RECORD 'YEARS AGO' ONLY IF LAST INTERCOURSE WAS ONE OR MORE YEARS AGO.	DAYS AGO . . . . . 1 [ ][ ] WEEKS AGO . . . . . 2 [ ][ ] MONTHS AGO . . . . . 3 [ ][ ] YEARS AGO . . . . . 4 [ ][ ]	→524
516	The last time you had sexual intercourse, did you use a condom?	YES . . . . . 1 NO 2	
517	What is your relationship to the woman with whom you last had sex? IF "BOYFRIEND" OR "FIANCE", ASK: Was your girlfriend/fiance living with you when you last had sex? IF YES, RECORD '1'. IF NO, RECORD '2'.	WIFE/COHABITING PARTNER . . . . . 1 GIRLFRIEND/FIANCEE . . . . . 2 OTHER FRIEND . . . . . 3 CASUAL ACQUAINTANCE . . . . . 4 COMMERCIAL SEX CUSTOMER . . . . 5 RELATIVE . . . . . 6 OTHER _____ 7 (SPECIFY)	→519

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
518	For how long have you had a sexual relationship with this woman?	DAYS . . . . . 1 [ ][ ] WEEKS . . . . . 2 [ ][ ] MONTHS . . . . . 3 [ ][ ] YEARS . . . . . 4 [ ][ ]	
519	Have you had sex with anyone else in the last 12 months?	YES . . . . . 1 NO 2	 →524
520	The last time you had sexual intercourse with another woman, did you use a condom?	YES . . . . . 1 NO 2	
521	What is your relationship to this other woman? IF "BOYFRIEND" OR "FIANCE", ASK: Was your girlfriend/fiancee living with you when you last had sex? IF YES, RECORD '1'. IF NO, RECORD '2'.	WIFE/COHABITING PARTNER . . . . . 1 GIRLFRIEND/FIANCEE . . . . . 2 OTHER FRIEND . . . . . 3 CASUAL ACQUAINTANCE . . . . . 4 COMMERCIAL SEX CUSTOMER . . . . 5 RELATIVE . . . . . 6 OTHER _____ 7 (SPECIFY)	→523
522	For how long have you had a sexual relationship with this woman?	DAYS . . . . . 1 [ ][ ] WEEKS . . . . . 2 [ ][ ] MONTHS . . . . . 3 [ ][ ] YEARS . . . . . 4 [ ][ ]	
523	In total, how many women have you had sex with in the last 12 months?	NUMBER OF PARTNERS . . . [ ][ ]	
524	Do you know of a place where you can get condoms?	YES . . . . . 1 NO 2	 →601
525	Where is that? IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	GOVERNMENT/PUBLIC SECTOR REGIONAL/CONSULTANT HOSP 11 DISTRICT HOSPITAL . . . . . 12 GOVT. HEALTH CENTRE . . . . . 13 DISPENSARY/PARASTATAL FACILITY . . . . . 14 VILLAGE HEALTH POST/WORKER 15 PRIVATE MEDICAL SECTOR RELIGIOUS ORGANISATION FACILITY/MISSION HOSP . . . . . 21 PRIVATE DOCTOR/CLINIC/HOSP 22 PHARMACY/MEDICAL STORE . . . 23 CBD WORKER . . . . . 24 OTHER PRIVATE SECTOR SHOP/KIOSK . . . . . 31 CHURCH . . . . . 32 FRIEND/RELATIVE/NEIGHBOUR . 33 HEALTH EDUCATION/BAR GIRLS 34 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
526	Is it acceptable for a woman to ask a man to use a condom?	YES . . . . . 1 NO . . . . . 2 DOES NOT KNOW 8	
527	What if a woman's husband has a sexually transmitted disease. Would it be acceptable for her to ask him to use a condom or to refuse to have sex with him?	YES . . . . . 1 NO . . . . . 2 DOES NOT KNOW 8	

SECTION 6. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	CHECK 310: USING A METHOD? NOT ASKED ☐ ▼ NOT CURRENTLY USING ☐ ▼ CURRENTLY USING ☐		→614
607	Why are you not using a method of family planning?	NOT MARRIED . . . . . A FERTILITY-RELATED REASONS NOT HAVING SEX . . . . . B INFREQUENT SEX . . . . . C MENOPAUSAL/HYSTERECTOMY. . D SUBFECUND/INFECUND . . . . . E POSTPARTUM AMENORRHEIC . . . F BREASTFEEDING . . . . . G FATALISTIC . . . . . H OPPOSITION TO USE RESPONDENT OPPOSED . . . . . I HUSBAND/PARTNER OPPOSED . . . J OTHERS OPPOSED . . . . . K RELIGIOUS PROHIBITION . . . . . L LACK OF KNOWLEDGE KNOWS NO METHOD . . . . . M KNOWS NO SOURCE . . . . . N METHOD-RELATED REASONS HEALTH CONCERNS . . . . . O FEAR OF SIDE EFFECTS . . . . . P LACK OF ACCESS/TOO FAR . . . . . Q COST TOO MUCH . . . . . R INCONVENIENT TO USE . . . . . S INTERFERES WITH BODY'S NATURAL PROCESSES . . . . . T OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
610	Do you think you will use a method to delay or avoid pregnancy within the next 12 months?	YES . . . . . 1 NO . . . . . 2 DOES NOT KNOW 8	→614
612	What is the main reason that you think you will not use a method in the next 12 months?	NOT MARRIED . . . . . A FERTILITY-RELATED REASONS NOT HAVING SEX . . . . . B INFREQUENT SEX . . . . . C MENOPAUSAL/HYSTERECTOMY . D SUBFECUND/INFECUND . . . . . E POSTPARTUM/AMENORRHOEIC . F BREASTFEEDING . . . . . G WANTS AS MANY CHILDREN AS POSSIBLE . . . . . H OPPOSITION TO USE RESPONDENT OPPOSED . . . . . I HUSBAND/PARTNER OPPOSED . . . J OTHERS OPPOSED . . . . . K RELIGIOUS PROHIBITION . . . . . L LACK OF KNOWLEDGE KNOWS NO METHOD . . . . . M KNOWS NO SOURCE . . . . . N METHOD-RELATED REASONS HEALTH CONCERNS . . . . . O FEAR OF SIDE EFFECTS . . . . . P LACK OF ACCESS/TOO FAR . . . . . Q COST TOO MUCH . . . . . R INCONVENIENT TO USE . . . . . S INTERFERES WITH BODY'S NORMAL PROCESSES . . . . . T OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
614	CHECK 118: HAS CHILDREN ☐ ▼ — If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? HAS NO CHILDREN ☐ ▼ — If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NUMBER . . . . . ☐☐ OTHER _____ 96 (SPECIFY)	
616	Would you say that you approve or disapprove of couples using a method to avoid getting pregnant?	APPROVE . . . . . 1 DISAPPROVE . . . . . 2 DON'T KNOW/UNSURE 3	
617	In the last six months have you heard about family planning:	YES NO	
	On the radio?	RADIO 1 2	
	On the television?	TELEVISION 1 2	
	In a newspaper or magazine?	NEWSPAPER OR MAGAZINE . 1 2	
	From a poster?	POSTER 1 2	
	From a leaflet or pamphlet?	LEAFLET/PAMPHLET 1 2	
	From billboards?	BILLBOARDS 1 2	
	At community events?	COMMUNITY EVENT 1 2	
	From live drama?	LIVE DRAMA 1 2	
	From a doctor or a nurse?	DOCTOR OR NURSE 1 2	
618	In the last six months, what drama series have you listened to on the radio? CIRCLE THE SERIES MENTIONED SPONTANEOUSLY. FOR THOSE NOT MENTIONED, ASK: In the last 6 months, have you listened to:	YES, SPONTANEOUS / YES, PROBED / NO	
	Zinduka, a radio show featuring a character named Dr.Kurwa?	ZINDUKA 1 2 3	
	Twende na Wakati, a show featuring a character named Mkwaju?	TWENDE NA WAKATI . 1 2 3	
	Geuza Mwendo?	GEUZA MWENDO 1 2 3	
	Ukimwi Kifo?	UKIMWI KIFO 1 2 3	
	Sema Naye?	SEMA NAYE 1 2 3	
	Vijana wetu?	VIJANA WETU 1 2 3	
618A	CHECK 618: LISTENED TO ZINDUKA ☐ ▼ DID NOT LISTEN TO ZINDUKA ☐ →		→618E
618B	How often do you listen to Zinduka?	TWICE A WEEK . . . . . 1 ONCE A WEEK . . . . . 2 ONCE OR TWICE A MONTH . . . . . 3 RARELY . . . . . 4 DOES NOT KNOW 8	
618C	As a result of listening to Zinduka, did you do anything or take any action related to family planning?	YES . . . . . 1 NO . . . . . 2 →618E DOES NOT KNOW . . . . . 8 →618E	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
618D	What did you do as a result of listening to Zinduka? RECORD ALL MENTIONED.	TALKED TO PARTNER . . . . . A TALKED TO HEALTH WORKER . . . . B TALKED TO SOMEONE ELSE . . . . . C WENT TO CLINIC FOR FAM.PLAN. . . D BEGAN USING MODERN METHOD . E BEGAN USING CONDOMS . . . . . F OTHER _____ X (SPECIFY)	
618E	CHECK 618: LISTENED TO TWENDE ☐ ▼ DID NOT LISTEN TO TWENDE ☐		→618I
618F	How often do you listen to Twende na Wakati?	TWICE A WEEK . . . . . 1 ONCE A WEEK . . . . . 2 ONCE OR TWICE A MONTH . . . . . 3 RARELY . . . . . 4 DOES NOT KNOW 8	
618G	As a result of listening to Twende na Wakati, did you do anything or take any action related to family planning or health?	YES . . . . . 1 NO . . . . . 2 →618I DOES NOT KNOW . . . . . 8 →618I	
618H	What did you do as a result of listening to Twende na Wakati? RECORD ALL MENTIONED.	TALKED TO PARTNER . . . . . A TALKED TO HEALTH WORKER . . . . B TALKED TO SOMEONE ELSE . . . . . C WENT TO CLINIC FOR FAM.PLAN. . . D BEGAN USING MODERN METHOD . E BEGAN USING CONDOMS . . . . . F OTHER _____ X (SPECIFY)	
618I	CHECK 618: LISTENED TO VIJANA WETU ☐ ▼ DID NOT LISTEN TO VIJANA WETU ☐		→619
618J	How often do you listen to Vijana Wetu?	TWICE A WEEK . . . . . 1 ONCE A WEEK . . . . . 2 ONCE OR TWICE A MONTH . . . . . 3 RARELY . . . . . 4 DOES NOT KNOW 8	
618K	As a result of listening to Vijana Wetu, did you do anything or take any action related to family planning or health?	YES . . . . . 1 NO . . . . . 2 →619 DOES NOT KNOW . . . . . 8 →619	
618L	What did you do as a result of listening to Vijana Wetu? RECORD ALL MENTIONED.	TALKED TO PARTNER . . . . . A TALKED TO HEALTH WORKER . . . . B TALKED TO PARENT, TEACHER . . . C WENT TO CLINIC, YOUTH CENTRE . D BEGAN USING MODERN METHOD . E BEGAN USING CONDOMS . . . . . F OTHER _____ X (SPECIFY)	
619	In the last 6 months, have you heard or seen a message about Salama condoms?	YES . . . . . 1 NO . . . . . 2 →621 DOES NOT KNOW . . . . . 8 →621	
620	Where did you hear or see the message about Salama condoms? DO NOT READ CODES. RECORD ALL MENTIONED.	RADIO . . . . . A TELEVISION . . . . . B NEWSPAPER OR MAGAZINE . . . . . C POSTER . . . . . D LEAFLET OR PAMPHLET . . . . . E BILLBOARD . . . . . F COMMUNITY EVENT . . . . . G LIVE DRAMA . . . . . H SALES REPRESENTATIVE . . . . . I OTHER X	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
621	CHECK 501: YES, CURRENTLY MARRIED ☐ ▼ YES, LIVING WITH A WOMAN ☐ ▼ NO, NOT IN UNION ☐		→701
622	Now I want to ask you about your wife's/partner's views on family planning. Do you think that your wife/partner approves or disapproves of couples using a method to avoid pregnancy?	APPROVES . . . . . 1 DISAPPROVES . . . . . 2 DON'T KNOW 8	
623	How often have you talked to your wife/partner about family planning in the past year?	NEVER . . . . . 1 ONCE OR TWICE . . . . . 2 MORE OFTEN 3	

SECTION 7. WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	Are you currently working?	YES . . . . . 1 NO 2	→704
703	Have you done any work in the last 12 months?	YES . . . . . 1 NO 2	→801
704	What is your occupation, that is, what kind of work do you mainly do?	_____ ☐☐ _____ _____	
705	CHECK 704: WORKS IN AGRICULTURE ☐ ▼ DOES NOT WORK IN AGRICULTURE ☐		→707
706	Do you work mainly on your own land or on family land, or do you work on land that you rent from someone else, or do you work on someone else's land?	OWN LAND . . . . . 1 FAMILY LAND . . . . . 2 RENTED LAND . . . . . 3 SOMEONE ELSE'S LAND 4	
707	Do you do this work for a member of your family, for someone else, or are you self-employed?	FOR FAMILY MEMBER . . . . . 1 FOR SOMEONE ELSE . . . . . 2 SELF-EMPLOYED 3	
708	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR . . . . . 1 SEASONALLY/PART OF THE YEAR . 2 ONCE IN A WHILE 3	
709	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY . . . . . 1 CASH AND KIND . . . . . 2 IN KIND ONLY . . . . . 3 NOT PAID 4	

SECTION 8: AIDS AND OTHER SEXUALLY TRANSMITTED DISEASES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	Now I would like to talk about something else. Have you ever heard of the virus HIV or an illness called AIDS?	YES . . . . . 1 NO 2	→821
802	Is there anything a person can do to avoid getting infected with HIV, the virus that causes AIDS?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→809
803	What can a person do? Anything else? RECORD ALL MENTIONED.	ABSTAIN FROM SEX . . . . . A USE CONDOMS . . . . . B LIMIT SEX TO ONE PARTNER/STAY FAITHFUL TO ONE PARTNER . . . . C LIMIT NUMBER OF SEX PARTNERS D AVOID SEX WITH PROSTITUTES . . . E AVOID SEX WITH PERSONS WHO HAVE MANY PARTNERS . . . . . F AVOID SEX WITH HOMOSEXUALS . G AVOID SEX WITH PERSONS WHO INJECT DRUGS INTRAVENOUSLY H AVOID BLOOD TRANSFUSIONS . . . . . I AVOID INJECTIONS . . . . . J AVOID KISSING . . . . . K AVOID MOSQUITO BITES . . . . . L SEEK PROTECTION FROM TRADITIONAL HEALER . . . . . M AVOID SHARING RAZORS/BLADES . N OTHER _____ W OTHER _____ X DON'T KNOW . . . . . Z	
804	Can people protect themselves from getting the AIDS virus by having just one sex partner who has no other partners?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
805	Can a person get the AIDS virus from mosquito bites?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
806	Can people protect themselves from getting the AIDS virus by using a condom every time they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
807	Can people protect themselves from getting the AIDS virus by not sharing food with a person who has AIDS?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
808	Can people protect themselves from getting the AIDS virus by abstaining completely from sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
809	Is it possible for a healthy-looking person to have the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
811	Do you know someone personally who has the virus that causes AIDS or someone who died from AIDS?	YES . . . . . 1 NO 2	
812	Can the virus that causes AIDS be transmitted from a mother to a child?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→814
813	When can the virus that causes AIDS be transmitted from a mother to a child? Can it be transmitted: During pregnancy? During delivery? During breastfeeding?	YES NO DK PREGNANCY . . . . . 1 2 8 DURING DELIVERY . . . 1 2 8 BREASTFEEDING 1 2 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
814	Do you think your chances of getting AIDS are small, moderate, great or no risk at all?	SMALL . . . . . 1 MODERATE . . . . . 2 GREAT . . . . . 3 NO RISK AT ALL . . . . . 4 DOES NOT KNOW . . . . . 8 HAS AIDS 6	 →816 →816 →817 →817
815	Why do you think that you have (NO CHANCE/SMALL CHANCE) of getting AIDS? Any other reasons? RECORD ALL MENTIONED.	NO SEXUAL INTERCOURSE . . . . . A PARTNER HAS NO OTHER WOMEN B SLEEPS ONLY WITH ONE PARTNER C USES CONDOMS . . . . . D OTHER _____ X (SPECIFY)	→817
816	Why do you think that you have a (MODERATE/GREAT) risk or getting AIDS? Any others reasons? RECORD ALL MENTIONED.	HAS MULTIPLE PARTNERS . . . . . A PARTNER HAS OTHER WOMEN . . . B DOES NOT USE CONDOMS . . . . . C HAD INJECTION, BLOOD TRANSFUS D OTHER _____ X (SPECIFY)	
817	Have you ever been tested to see if you have the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DOES NOT KNOW/NOT SURE 8	→821
818	Would you like to be tested for the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DOES NOT KNOW/NOT SURE 8	 →820 →820
819	Why haven't you gotten tested for the AIDS virus?	DOES NOT KNOW WHERE TO GO . A COSTS TOO MUCH . . . . . B AFRAID TO GET RESULTS . . . . . C DOES NOT HAVE TIME TO GO . . . . . D OTHER _____ X (SPECIFY)	
820	Do you know a place where you could go to get an AIDS test?	YES . . . . . 1 NO 2	
821	Do you know any methods that can protect against pregnancy as well as protecting against sexual diseases?	PILL, ORAL CONTRACEPTIVE . . . . . 1 CONDOM . . . . . 2 OTHER _____ 6 (SPECIFY) DOES NOT KNOW ANY METHODS . 8	
822	RECORD THE TIME.	HOUR . . . . . ☐☐ MINUTES . . . . . ☐☐ MORNING . . . . . 1 AFTERNOON . . . . . 2 EVENING, NIGHT 3	

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT RESPONDENT:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

NAME OF THE SUPERVISOR:_____
. DATE: _____

EDITOR'S OBSERVATIONS

NAME OF EDITOR:_____
. DATE: _____